

The Life of Reason in Plato's *Republic*: Its Nature and
Limitations

by

Brandon Ho
Class of 2018

A thesis (or essay) submitted to the
faculty of Wesleyan University
in partial fulfillment of the requirements for the
Degree of Bachelor of Arts
with Departmental Honors in Philosophy

In memoriam
Gracie and 鳥鳥.

Contents

Acknowledgements.....	4
Introduction.....	5
Chapter One: The Nature of Reason.....	13
§1. The <i>Kallipolis</i> and the Virtue of Moderation.....	14
§2. Tripartite Theory of Motivation.....	16
§3. Philosophic Soul-Type as Ideally Rational.....	24
§4. Moderation Entailing Lower-level Rationality.....	27
§5. The Necessity for Reason to Rule in the Souls of Producers	29
§6. Moderation is the Primary Virtue of Producers.....	31
Chapter Two: The Embodied Soul and Challenges to Reason.....	43
§7. An Introduction to the Dual-Process Theory of Judgement	44
§8. System 2: Ego Depletion and Cognitive Strain	50
§9. System 1: Associative Activation and Cognitive Ease	55
§10. Availability Heuristics and Plato’s Theory of the Soul	59
§11. System 1 and System 2 in the <i>Republic</i>	63
§12. Soul Division in <i>Republic IV</i> and <i>Republic X</i>	66
§13. Spirit as Essential to an Embodied Soul and Its Relation to Appearances.....	69
§14. Appetite as Essential to an Embodied Soul and Its Relation to Appearances	72
Chapter Three: Reasoning and the Producers.....	78
§15. The Necessity of Sense-perception in Reasoned Judgements	79
§16. The Dialectical Method.....	82
§17. An Educational Curriculum for the Producers.....	95
Conclusion	110
References.....	119

Acknowledgements

I would like to first offer my sincere gratitude to my thesis advisor, Tushar Irani. Without his encouragement, guidance, and careful eye for attention and detail, I never would have been able to complete this project. I'm very fortunate to have had him as an instructor, academic advisor, and thesis advisor throughout the duration of my time here at Wesleyan University; he has been a profound source of inspiration for both my intellectual and personal development.

I would also like to thank the Wesleyan University Philosophy Department for being my home for the past four years. The philosophy courses I've taken throughout my time here at Wesleyan University have been eye-opening, mind-bending, and life-changing. I would also like to give special thanks to Professor Joseph Rouse, whose classes in the philosophy of science and 20th-century philosophy have been enormously influential in shaping my way of thinking, and Professor Stephen Angle, whose courses in classical Chinese philosophy and human rights have given me the opportunity to learn about and reflect on my own cultural values.

Lastly, I would like to thank my family and friends for being a constant source of encouragement and support throughout this entire project. To my friends, Levi and Tom, thank you for being good company in times of triumph and in times of trial.

Introduction

This project is centrally concerned with the question: “What does it mean to be a rational person?” I first became interested in this question after taking a course in introductory economics, where my instructor introduced the notion of *homo economicus*. The term *homo economicus* is used to characterize the ‘perfectly rational’ agent at the heart of economic theories; what it means to be ‘rational’ under rational choice theory is to always act in a manner that will maximize one’s utility, so every decision that *homo economicus* makes is determined to bring him the most benefits. Although *homo economicus* is a fictional entity, a necessary assumption about human behavior that economists must make for demand curves – among other things – to be downward-sloping, this conception of rationality is not distant from how people ordinarily conceive of themselves and others as ‘rational’; that is, as freely acting in their own best interests. The assumption that others are acting under ‘rational choice theory’ has enormous implications for how we interpret and respond to their choices. Consider how, in the realm of international politics, foreign policy is shaped by the assumption that states act in a manner that preserves their survival; this assumption changes whether the President of the United States decides to exchange bombs or words in response to the colorful but belligerent rhetoric of the North Korean regime. Thus, rational choice theory and the notion of *homo economicus* forms the foundation of contemporary and popular accounts of rationality, most particularly in the social sciences.

However, the notion of *homo economicus* has been challenged by the research and findings conducted by economists and psychologists working in the fields of

behavioral economics and social and cognitive psychology, which have grown significantly in the past 40 years. Specifically, behavioral economists and psychologists like Amos Tversky, Daniel Kahneman, Paul Slovic, Jonathan Evans, and Richard Thaler have been enormously influential and productive in generating research concerned with uncovering how the use of heuristics in judgement and decision-making and other innate structures of human cognition produce cognitive biases and other instances of fallacious reasoning. However, it isn't just the case that research in behavioral economics has challenged the economists' assumption of 'rational' human behavior; they also challenge how we ordinarily conceive of ourselves as freely acting in our own best interests by suggesting that our preferences aren't fully determined and freely chosen and that we lack conscious access to and control over cognitive processes that lead us to form beliefs, adopt values, make choices, and take actions.

Given what behavioral economics and social psychology have uncovered about cognitive biases and heuristics, I'm primarily seeking to understand whether these inherent flaws of human reasoning pose challenges to Plato's conception of reason and its role in the soul. Plato's *Republic* begins with a formulation of the same question I seek to address, since he's interested in developing an answer to the question: "What does it mean to live a life of reason?" As we'll see in the following chapters, Plato's answer to this question depends on addressing the nature of reason, the possibility for one to live a life of reason, and how one would go about realizing this possibility. A secondary aim throughout this thesis that motivates the issue of cognitive biases and fallacious reasoning is to give an account of how the producers

in Plato's ideal city – the *kallipolis* – are supposed to be ruled by their reason. Plato spends the entire length of the *Republic* responding to Thrasymachus' challenge of whether it's better for one to live justly than unjustly by developing an account of the true philosopher as the ideally rational person. However, throughout the *Republic*, Plato is notably silent on how the producers in the *kallipolis* are supposed to receive an education and live justly when they don't possess the best natures and aren't naturally driven to discover the truth. In fact, a common interpretation among some scholars is that the producers aren't ruled by the rational part of their souls; it's difficult to escape this conclusion when we learn that appetite tends to pursue money as the primary object of its desires and that the function of the producers is to make money. Thus, it seems that – if Plato's conception of the soul and of rationality were compatible with the behavioral economist's view of cognitive processing – the producers would be most susceptible to exhibiting cognitive biases and fallacious reasoning, which could possibly preclude them from living justly and thus weaken Plato's claim that the *kallipolis* is the best constitution. However, if we consider the fact that all souls living in the visible realm are embodied souls that must depend on intuition and sense-perception in some capacity, there's a possibility that even philosophers are susceptible to the problem of cognitive biases and fallacious reasoning. If so, then it is likely that those who are ruled by the rational part of the soul would nevertheless end up making irrational decisions, which would be a serious problem for Plato's account of rationality and how the just person – where justice is defined as a state in which reason rules the entire soul – is supposed to live the good life.

My aim in this project is to defend a specific interpretation of Plato's conception of rationality and the just soul, and to extend Plato's insights about various cognitive and motivational capacities of the soul to the present day. However, doing so first necessitates that Plato's account of the soul and of rationality is somehow compatible with how we think of rationality and the mind today. Building on the work of Rachel Singpurwalla, specifically her suggestion in "Plato's Tripartite Theory of Motivation" that Plato's account of the soul in *Republic X* can be interpreted in terms of a dual-process theory of judgement, I aim to develop such an interpretation, and examine whether Plato can offer us any insights into how we might combat the innate flaws in our cognitive capacities. Furthermore, given that given that not everyone wants to be a philosopher or engage in philosophy as a way of life, how might non-philosophic souls – such as producers in Plato's *kallipolis*, but we can even consider the average person today – also be ruled by their reason, be responsive to ethical norms, and thereby live a good life? As Haewon Jeon asks at the end of her article, "The Interaction between the Just City and its Citizens in Plato's *Republic: From the Producers' Point of View*," can producers "be sensitive to the intrinsic value of some rational good and set it as the ultimate good without also having the desire or capacity to do philosophy?"¹ I want to suggest that Plato's account of the life of reason in the *Republic* necessitates this very possibility, and I'll develop an account of how producers and other non-philosophic souls can do so.

Chapter 1 of this thesis is dedicated to setting up the interpretative framework for Plato's account of rationality and to motivate the issue of how producers are ruled

¹ Jeon 2014, p. 201.

by their reason. I start by introducing an interpretation of Plato's tripartite division of the soul – developed by scholars like John Cooper and Rachel Singpurwalla – as a theory of human motivation. I see this as an important step because, on Plato's account, one's motivations and moral psychology are determined by the part of the soul that rules; what it means for one to be rational is thus centrally concerned with the motivations and moral psychology of someone who is ruled by reason, as opposed to spirit or appetite. Afterwards, I'll introduce an interpretation developed by George Klosko which claims that there are two ways in which reason can rule in the soul: the first of these is concerned with the ordering and subduing of the unnecessary and useless desires of spirit and appetite – reason is essentially responsible for orienting the entire soul towards living moderately – and I'll characterize this as a lower-level form of rationality. The second way in which reason can rule in the soul – and this is only possible in philosophic soul-types because they possess an innate desire to learn about the sense of being of entities in addition to what Melissa Lane calls natural virtues – is by directing the entire soul towards the objects of reason's own desires for wisdom, truth, and knowledge of the Forms. I characterize reason's rule in the philosophic soul-type as ideal rationality. I'll then consider and reject two opposing arguments which essentially claim that producers can't be ruled by their reason. The first of these viewpoints claims that producers are ruled by appetite instead of reason, while the second is a modification of the first; it claims that producers can be ruled by their appetite but still be moderate or rational if they possess souls that are similar to the oligarchic soul-type, who seem to subdue their unnecessary and useless appetitive desires despite being ruled by their appetites. I will then conclude chapter 1 by

arguing that, just as wisdom is the virtue of the true guardians, moderation should be thought of as the primary virtue of the producers, since they seem to lack the same capacity and tools that the guardians possess to subdue and control their desires.

Chapter 2 is concerned primarily with introducing the challenge that cognitive biases and other types of fallacious reasoning might pose to Plato's conception of the rational in terms of both lower—level and ideal rationality. I do so by relying on an account of the dual-process theory of judgement that Daniel Kahneman develops in his book *Thinking Fast and Slow*: System 1 is characterized as intuition, and it operates largely without our conscious awareness or control; System 1 is impulsive, automatic, and forms quick judgements that are largely based on feelings and experiences. On the other hand, System 2 is characterized as reflection, and it is responsible for deliberating, calculating, and reasoning; it requires mental effort and self-control to concentrate its attention on a task, analyze a situation, weigh different choices, and perform other forms of deliberate, conscious activities. The interaction between these two systems explains how we think, pass judgements, and act; however, there are inherent limits and flaws to the way that System 1 processes information and makes suggestions to System 2 that opens up the risk of cognitive biases and other forms of fallacious reasoning that arise from the use of heuristics. I then characterize Plato's conception of the soul in terms of System 1 and System 2 by considering an important interpretative issue surrounding the difference between his division of the soul into reason, spirit, and appetite in *Republic IV*, and his division of the soul into rational and non-rational parts in *Republic X* – in doing so, I'll be deferring in part to Jessica Moss and Rachel Singpurwalla's analysis of this issue.

Specifically, I'll explain how we can conceive of Plato's account of the rational part of the soul applying calculation and measurement to appearances as similar in function and features to System 2, whereas his characterization of how the non-rational part of the soul relies on sense-perception and is sensitive to moods, feelings, and experience can likewise be thought of as analogous to System 1. If this is right, Plato's conception of rationality is vulnerable to the errors of System 1 processing, which requires that he give an account of how philosophic and non-philosophic souls can actively engage the rational part of the soul to monitor and reject the intuitions and impressions generated by System 1 or the non-rational part of the soul.

Chapter 3 is dedicated to responding to the challenges laid out in chapter 2. I do so by considering two issues. The first is whether, given that philosophers have embodied human souls that are susceptible to the errors of System 1 processing, Plato gives us assurances that philosophers are nevertheless ideally rational and thus most qualified to rule in cities. I respond to this by arguing that Plato does not expect any embodied soul – even the philosophic soul-type – to be capable of engaging in pure rational activity. The textual support I use to make this point is the fall of the *kallipolis* in *Republic* VIII, which results from the fact that the true philosopher must rely on sense-perception together with calculation and measurement to determine the geometrical number that's concerned with the birth of children. However, even if the true philosopher can't be perfectly rational – in the sense that he or she must make use of sense-perception in some way in their practical judgements – they can still engage their reason and avoid or mitigate the problem presented by cognitive biases through the practice of the dialectical method, which forces them to submit their

unreflectively held beliefs and potential sources of bias to examination. then consider a second issue: whether non-philosophic souls, such as the producers in Plato's kallipolis, are also capable of engaging the rational part of their souls – even without possessing philosophic natures or being able to participate in dialectic. I argue that they can, first by an ethical education that is similar to the one that the guardians receive in music and poetry, physical training, and mathematics, and then by engaging in a lower-level method of hypothesis that's similar in structure to the method used by mathematicians in mathematical inquiry.

Chapter One: The Nature of Reason

Introduction

The main aim of this chapter is to get a sense for how Plato conceives of what it means for reason to rule in one's soul, of what it means to be a rational person. The obvious answer here is that the rational person is one whose rational part of the soul rules over the appetitive part of the soul, with spirit as an aid to reason. However, I'll be interpreting Plato's tripartition of the soul and his account in terms of a theory of human motivation, such that there are two accounts for what it means for reason to rule in one's soul: reason's rule as one of subduing the non-rational desires of spirit and appetite and guiding them towards the proper objects of their desires, and reason's rule as motivating the entire soul towards pursuing the objects of reason's own desires – wisdom, knowledge, and truth. The first account holds true across for all human souls generally, but the second account is true only for philosophic soul-types. The reason for this is that the souls of true philosophers inherently contain a number of natural virtues that enable them to pursue the study of the Forms without appetitive distractions; as such, their sense of self-control or moderation of non-rational desires is stronger than that of non-philosophic souls. Although wisdom is important in the *kallipolis* and in the philosophical soul-type, the virtue that I think is key for all souls is that of moderation, which is a civic virtue in the *kallipolis* that's spread throughout all three classes. Since non-philosophic souls are lacking in the types of natural virtues that make philosophic soul-types self-controlled, moderate, and temperate, it's essential that non-philosophic souls pursue moderation, as self-control over one's appetitive desires enables them too have some lower-level sort of

rationality and allows them to live justly. Moderation and developing an account of how non-philosophic souls can become moderate will be key themes in the following chapters.

§1. The *Kallipolis* and the Virtue of Moderation

Before Plato gives an account of justice in the soul, he begins with an account of justice in the city by establishing the origins of the just city. Plato justifies this move by stating that, since “there is more justice in the larger thing. . . it will be easier to learn what it is” (368e). Socrates states that the defining characteristic of the auxiliaries whose occupation it is to guard the city from internal unrest and external harm is the virtue of courage, which allows them to preserve the convictions of the guardians through pains and pleasures; likewise, the defining characteristic of the guardians who rule the city is the virtue of wisdom. Wisdom is a type of knowledge that allows the rulers to make good judgements, though it’s not the kind of technical knowledge that ordinary craftsmen like carpenters and farmers possess about joining wood together or raising crops. Instead, the wisdom that the guardians possess allows them to reason not “about any particular matter but about the city as a whole and the maintenance of good relations, both internally and with other cities” (428b). Although the guardians are at times characterized as ‘craftsmen’ of the city’s freedom, the main difference between the knowledge of guardians and that of ordinary, producing craftsmen is that the wisdom of guardians manifests itself in practical judgements, whereas the knowledge of craftsmen in the producing class is a type of technical knowledge (395b). Furthermore, the practical judgements of the guardians are mostly concerned with establishing the institutions that would produce justice in the city;

Plato sees education in music and poetry as central to this project, so the guardians are supposed to “cling to education and see that it isn’t corrupted without their noticing it, guarding it against everything” (424b). The values that come from one’s ethical education are more powerful and effective tools than laws and decrees in producing justice in the city, and Socrates even suggests that the just city wouldn’t have laws concerning tort liabilities because he thinks that creating legislation to “put a stop to cheating on contracts. . . [is] just cutting off a Hydra’s head. . . anyone could discover some of these things, while the others follow automatically from the ways of life we established” (427a). Thus, the kind of wisdom that guardians possess enables them to discover the right sorts of values and the proper ways of instilling them in the citizens through the city’s institutions. However, practical judgements alone aren’t sufficient to produce justice in the city, for justice requires that each class keep to its own work without meddling in the affairs of another.

The civic virtue of moderation is key in enabling this kind of political arrangement. Moderation is closely related to the idea of harmony in that moderation is a civic virtue that’s spread throughout the city because both “the ruler and the ruled share the same belief about who should rule. . . all sing the same song together” (431e, 432a). The key factor I see driving the producing class to consent to this form of political arrangement concerns the freedom that the guardians are crafting. I interpret this freedom as liberation from the temptations of unnecessary and useless appetitive desires. We see an instance of this type of freedom in *Republic I* when Cephalus is asked whether it’s unfortunate that he no longer has sexual desires at an old age; Cephalus states that “when the appetites relax and cease to importune us. . .

we escape from many mad masters” (329c). Of course, it’s important to draw a distinction here, since Cephalus’ desires for appetitive pleasures are silenced as a matter of his aging physical condition and not necessarily as a matter of his practicing moderation or exercising self-control. However, I think that Plato is drawing on the idea that true freedom consists not in having the option to do whatever one pleases, but in living the good life; that is, a just and moderate life. Thus, the kind of freedom that the guardians craft is freedom from being a slave to one’s appetitive and non-rational desires, and to pursue the good life as defined by the guardians, as “it is to his subjects and what is advantageous and proper to them that [the ruler] looks, and everything he says and does he says and does for them” (342e). It follows then that moderation is centrally concerned with the ordering of desires and pleasures, and since the producers lack this kind of wisdom, “the desires of the inferior many are controlled by the wisdom and desires of the superior few” (431d). Furthermore, what it means to practice moderation is to organize one’s internal constitution in such a way that one has a “mastery of certain kinds of pleasures and desires. . . that are simple, measured, and directed by calculation in accordance with understanding and correct belief” (430e, 431c). Although I’ll expand on this point further in chapter 3, the use of calculation and measurement that Socrates briefly mentions here is applied by the philosopher rulers through the dialectical method to the appearances of beliefs, values, and attitudes, in order to determine what is objectively correct – that is, what follows from the Form of the Good.

§2. Tripartite Theory of Motivation

Now that justice in the city has been established, Socrates make the important

move of applying the analogy of the just city to the soul. Socrates explicitly assumes that “a just man won’t differ at all from a just city in respect to the form of justice; rather, he’ll be like the city” (435b). Furthermore, since the just city was “thought to be just when each of the three natural classes within it did its own work, and it was thought to be moderate, courageous, and wise. . . if an individual has these same three parts in his soul, we will expect him to be correctly called by the same names as the city” (435bc). While it’s rather convenient for Plato’s argument that the human soul just happens to be divided into the same three parts that seem to be analogous to the three classes in the just city, as Hendrik Lorenz observes, “it would be a mistake to think that Socrates’ analysis is merely supposed to uncover three tendencies or capacities of the soul. . . [instead, each part of the soul] has its own characteristic concerns and sensitivities and its own objects of pursuit and avoidance.”² That is, spirit, reason, and appetite all possess distinct motivations to pursue objects of their desires, and the tension that arises between each of these three parts of the soul pursuing its own motivations and the rule of reason in deciding the good of the entire soul produces a rich psychology of human motivation.³ However, to make this move, Socrates first needs to justify that the soul is indeed composed of three different parts, which he does through the application of the principle of opposites. It states that “the same thing will not be willing to do or undergo opposites in the same part of itself, in relation to the same thing, at the same time. . . if we ever find this happening in the soul, we’ll know we aren’t dealing with one thing but many” (436b). Before he illustrates the distinction between appetite and reason, he first clarifies that “each

² Lorenz 2006, p. 149.

³ Singpurwalla 2010, p. 880.

appetite is itself for its natural object, while the appetite of something of a certain sort depends on additions. . . let no one catch us unprepared or disturb us by claiming that. . . everyone after all has appetite for good things” (438a). That is, appetite’s desires for various bodily pleasures are generic; it doesn’t have preferences for good drink over bad drink or vice-versa, it just desires to drink. For example, consider a stranded sailor floating on a dinghy in the middle of the sea who is desperately thirsty; his appetite doesn’t discriminate between drinking sea water that would eventually kill him and rain water from a passing storm, it only wishes to quench its thirst. Although its often the case that the people who find themselves in such an unfortunate situation do end up drinking sea water, there are also those who refuse to do so, despite their intense thirst. In the second case, it must be that “there is something in their soul, bidding them to drink, and something different, forbidding them to do so, that overrules the thing that bids. . . as a result of rational calculation, while what drives and drags them to drink is a result of feelings” (439cd). Since there are apparently two forces in the person’s soul that pull him in opposite directions regarding the object of his desire to drink, it’s clear that these two forces are distinct parts of the soul, and “the part of the soul with which it calculates [is] the rational part and the part with which it lusts, hungers, thirsts, and gets excited by other appetites [is] the irrational appetitive part, companion of certain indulgences and pleasures” (439d). As I’ll explain later in chapter 2, the decision for reason on the one hand to form beliefs based on calculation and measurement and appetite on the other hand to base decisions on appearances alone has implications for ethical decision-making. We can characterize the pull of reason on the soul not to drink water as a rational desire,

whereas that of appetite is a non-rational desire.

However, what of spirit and its desires? Does spirit, which animates the soul with anger and other emotions, belong to appetite, reason, or is it an entirely separate part of the soul? To better isolate spirit, Socrates tells the story of Leontius, who “had an appetite to look at [corpses] but at the same time he was disgusted and turned away . . . he struggled with himself and covered his face, but, finally, overpowered by the appetite, he pushed his eyes wide open and rushed towards the corpses” (440a). One interpretation of why spirit causes Leontius to feel this deep sense of shame, disgust, and anger is that it knows that looking at corpses is socially taboo, so it desires to defend Leontius’ honor and reputation by subduing the desires of appetite – if only temporarily. However, spirit can sometimes also act against reason; for example, when someone believes that an injustice has been done to him, the “spirit within him [is] boiling and angry. . . not ceasing from noble actions until it either wins, dies, or calms down, called to heel by the reason within him, like a dog by a shepherd” (440d). Spirited desires clearly involve some sort of evaluation about the good, such as in the cases of Leontius and Odysseus, although they seem to be “dependent on partial or incomplete assessments of a situation,”⁴ which means that some spirited desires might also be grouped under the category of non-rational desires.

However, given what’s been said about spirit’s tendency to sometimes pursue non-rational desires, how does spirit enable reason to rule in the soul? When spirit is finally tamed, it works together with reason to “govern the appetitive part . . . [to] see

⁴ Singpurwalla 2010, p. 885.

that it isn't filled with the pleasures that are called 'bodily,' and that it doesn't become so big and strong it no longer does its own work but attempts to enslave and rule over the classes it isn't fitted to rule" (442ab). Spirit's affinity with honor and reputation gives it an important social function, as it motivates the soul to act in a manner that aligns with social norms and thus enables the soul to gain a sense of self-worth that partially derives from the approval of others, though its role as a police-force in the soul need not be filtered through the "social nexus of insult, injury, and retaliation."⁵ Instead, we can see spirit as a "necessary bond between two things that would otherwise lack unity. . . created to overcome an interaction problem"⁶ between reason and appetite. Reason is the smallest part of the soul, and it's too feeble – "in some quite mysterious psychodynamic sense"⁷ – to subdue appetite on its own, as the appetitive part is "the biggest and strongest thing in [the soul]", so reason needs spirit as an ally to help keep the appetite in check (442d, 580e). Thus, whenever civil war between reason and appetite erupts in the soul, spirit "aligns itself far more with the rational part" (440e). However, it isn't the case that spirit is the naturally ally of reason because spirit's desire for the fine or the honorable is defined only in terms of social approval and disapproval. For example, if I was stranded on a desert island alone and with an endless amount of food and whatever other delicacies to satisfy my appetitive desires, "my spirit ought to act . . . restrain my appetite from indulgence. . . gross indulgence is vicious in a way that . . . is beneath me, absolutely, and not merely in relation to [the opinion] of others."⁸ Furthermore, one of the implications of

⁵ Brennan 2012, p. 124.

⁶ Brennan 2012, p. 123.

⁷ Ibid.

⁸ Brennan 2012, p. 119.

there being “a single form of. . . [each] thing we [previously] set down as many” is that there must also be a single form of the fine that the spirit pursues (507b). What it means then for spirit to pursue the fine or the honorable “is to engage in rational activity, including living up to our rational view of how we ought to behave, despite appetitive temptations to the contrary.”⁹ There is some intrinsically valuable standard of living that reason has endorsed as being good for the entire soul, and spirit makes us feel angry at ourselves when we fail to live up to the standard that reason has set out for us. Thus, spirit functions as a naturally ally to reason in the absence of explicit social approval and disapproval, as the object of its desires – the fine – is based on the kind of person we want to be. Just as justice in the city was a state in which each citizen did the work naturally suited for him without meddling in another’s work, justice in the soul “isn’t concerned with someone’s doing his own externally, but with what is inside him. . . he puts himself in order. . . [and] becomes entirely one, moderate, and harmonious” (443d).

Just as the rule of the guardians in the just city is a consensual agreement between the three classes in the city, it’s not the case that reason rules by forcibly replacing unnecessary and useless desires possessed by spirit and appetite with rational ones; Socrates criticizes the man who “forcibly hold[s] his other evil appetites in check by means of some decent part of himself. . . not by persuading them that it’s better not to act on them or taming them with arguments, but by compulsion and fear, trembling for his other possessions” (554cd). Since appetite can be reasoned with and reoriented towards rational desires, it’s clear that the “appetites

⁹ Singpurwalla 2013, p. 56.

are capable of affecting and being affected by our reasons or beliefs about value”¹⁰. Thus, there are two motivations that are produced in the soul when reason rules with spirit as its ally: “the desire to do what is just because we recognize that doing so is [intrinsically] good, and the desire to do what is just so that we can see ourselves, and others can see us, acting and feeling in tune with our rational beliefs.”¹¹ However, for reason “to be in a position to form views about what it is best to do in some set of circumstances, it must already have all sorts of beliefs or insights, crucially including ones about which things are worth pursuing.¹² It’s here where the difference between the rule of reason in the philosophic and the non-philosophic souls is made most apparent, because reason in philosophic souls produces motivation to pursue its own desires and also evaluates the sources of one’s beliefs, desires, and values such that one can study the Forms and find wisdom about better and worse pleasures.

However, spirit and appetite’s production of non-rational desires doesn’t preclude either of them from reflecting about the objects of their desires. After all, Socrates states that “every soul pursues the good and does whatever it does for its sake” (505d). If appetite or spirit can generate some beliefs about value, “then it is likely that they involve some conception of the value of their objects,”¹³ even if those conceptions are mistaken or don’t fully arrive at what’s really good. In Plato’s political analogy, even the producers whose souls are most likely to be ruled by their appetites seek the good, although their souls are “perplexed and cannot adequately grasp what it is or acquire the sort of stable beliefs it has about other things, and so it

¹⁰ Singpurwalla 2010, p. 885.

¹¹ Singpurwalla 2013, p. 64.

¹² Lorenz 2006, p. 154.

¹³ Ibid.

misses the benefit, if any, that even those other things may give” (505e). For this reason, producers are easily misled by sophists, rhetoricians, and imitators who aim to deceive them about what it means to live the good life.

Thus, it’s not the case that appetite or spirit do not reflect on the object of their desires; rather, the sorts of mistaken beliefs and values that characterize the non-rational desires of both appetite and spirit are the result of “flawed and inadequate beliefs and efforts at reasoning,”¹⁴ and as I’ll expand on later in chapter 3, are flawed because they are acquired through uncritically endorsing the impressions generated by sense perception, or the non-rational part of the soul. As a result, appetite mostly desires sensory pleasures, although it’s also the “money-loving part because such appetites are most easily satisfied by means of money”, whereas the spirited part “is wholly dedicated to the pursuit of control, victory, and high repute. . . [which makes] it victory-loving and honor-loving” (580e, 581ab). Thus, the non-rational desires generated by appetite and spirit are selfish and ill-informed because they’re primarily concerned with the apparent good of an individual part of the soul – money and pleasure for appetite and reputation for spirit. Reason, spirit, and appetite are all distinct parts of the soul, and they are analogous to the division of classes in the just city: reason’s analogue is the guardian, spirit the auxiliary, and appetite the producer. Likewise, we find the three cardinal virtues in the human soul: wisdom is the virtue of reason, courage that of spirit, and moderation is an agreement between the three parts of the soul and particular the consent of appetite that it’s “appropriate for the rational part to rule, since it is really wise and exercises foresight on behalf of the whole soul”

¹⁴ Lorenz 2006, p. 155.

(441e). Thus, the tripartite division of the soul can be articulated in terms of a theory of motivation by which the entire soul should be motivated to pursue the object of the desires of the part of the soul that rules.

§3. Philosophic Soul-Type as Ideally Rational

The rule of reason in the philosophic soul-type is distinct from that of non-philosophic souls because it depends on the presence of natural virtues and a natural desire for truth and knowledge. Just as appetite desires sensory pleasures and spirit desires reputation, reason is also capable of generating desires and aversions of its own that conflict with those of the other parts of the soul.¹⁵ Reason is described throughout the *Republic* as possessing an erotic love for truth that, in philosophic souls, produces such strong motivations that Socrates graphically characterizes reason's pursuit of truth "as having intercourse with it and having begotten understanding and truth, he knows, truly lives, is nourished. . . [and] relieved from the pains of giving birth" (490b). At first glance it seems that truth is the object of reason's desire while at the same time what distinguishes the natures of philosophic souls from those of non-philosophic souls is that natural philosophers are "by nature good at remembering, quick to learn, high-minded, graceful, and a friend and relative of truth, justice, courage, and moderation. (487a)" Melissa Lane characterizes these qualities as natural virtues that are "preconditions for acquiring philosophical knowledge"¹⁶ because they exert a hydraulic effect whereby "psychic energy flows into this love [for learning], depriv[ing] other desires of the energy to oppose or

¹⁵ Lorenz 2006, p. 154.

¹⁶ Lane 2007, p. 45.

distract one from the desire to learn.”¹⁷ Even before natural philosophers are educated in music, poetry, and mathematics and come to possess knowledge about the Forms that informs their values and beliefs about the good they should pursue, they’re attracted to the type of learning that makes “clear to them some feature of the being that always is and does not wander around between coming to be and decaying” (485b). Their natural love of learning predisposes them to express temperance towards the desires of spirit and appetite because they pale in comparison to the pleasure gained from learning about the being of each thing. The hydraulic effect is essential then because it enables the natural philosophers to pursue philosophy wholeheartedly, whereas the distractions of appetitive desires far more easily tempt non-philosophic souls and even the philosophic souls who have been corrupted by their upbringing to pursue useless and unnecessary pleasures. Thus, in the philosophic soul-type, reason directs the soul as a whole “towards its preferred objects, which are the goods of reason rather than of appetite.”¹⁸ However, the hydraulic effect and the philosophic soul’s possession of natural virtues aren’t sufficient to guarantee that he’ll develop into a true philosopher.

After all, the young philosophic soul is merely pulled along by reason’s desire for the truth without having reflected much on whether his love for learning is a way of life that he truly endorses or whether such a pursuit relates to the Form of the Good. It’s only after the philosophic soul is raised in the right type of a social environment where he’s allowed to pursue his love of learning and educated with the type of curriculum prescribed in *Republic* VII that he develops into a true philosopher

¹⁷ Lane 2007, p. 45.

¹⁸ Klosko 1988, p. 343.

who is able to evaluate the sources of his beliefs, desires, and values and endorse them through the practice of philosophy. In fact, Socrates thinks that the practice of philosophy should be carefully guarded because there's a danger that, if those "men who are unworthy of education approach philosophy and consort with her unworthily. . . [then they'll beget] what are properly called sophisms, things that have nothing genuine about them or worthy of being called true wisdom" (496a). When reason is fully developed, its "desire to know the truth is the desire to achieve and maintain a comprehensive understanding of reality, which includes. . . knowing the Form of the Good. . . [which yields] insights to the effect that something or other is. . . advantageous for a person, or for some part of their soul."¹⁹ After philosophers-in-training understand the Form of Good, they come to endorse the rational desires, beliefs, and values that they were originally brought up with by relating them to the Form of the Good. However, just as the non-rational desires of spirit and appetite had to be restrained by reason from growing too large because it looks to the good of the entire soul, so too must reason's own desires for the truth. Although the true philosopher would be happiest if he could just spend the entirety of his time reasoning about the world of Forms, Socrates states that those who ascend out of the cave and have seen the good "must [not] be allowed. . . to stay [outside] and refuse to go down again to the prisoners in the cave and share their labors and honors" (519d). Instead, he must be "compelled to put what he sees into people's character. . . instead of shaping only his own" (500d). Thus, what it means on Plato's account for someone to be ideally rational is for the rational part of his soul to form its beliefs and values

¹⁹ Lorenz 2006, p. 156.

about what's good for the entire soul as well as the rational desires that are good for spirit and appetite through reasoning about the Forms and understanding the Form of the Good. This is only possible in philosophic soul-types that have been appropriately trained in the method of dialectic, for only they can reason about the sources of their beliefs and values wisely; this is a result of both their upbringing and their natures. However, as I'll suggest later in chapter 3, there is also a possibility for non-philosophic soul-types to understand and endorse the beliefs, values, and attitudes that are sourced from the guardians.

§4. Moderation Entailing Lower-level Rationality

We can now distinguish between ideal rationality as represented in philosophic souls and lower-level rationality in souls generally. In both non-philosophic and philosophic soul-types, one of the main functions of reason is to look to the good of the entire soul, which entails subordinating the desires of separate parts of the soul such that those desires benefit the entire soul,²⁰ meaning that each part of the soul pursues only the proper object of its desire. For example, reason would rationally persuade appetite to qualify its pursuit of pleasure to only those that are necessary; good drink or good food instead of whatever it comes across when it's hungry or thirsty. Reason can only do so because it "has within it the knowledge of what is advantageous for each part and for the whole soul, which is the community of all three parts," whereas appetite and spirit can only selfishly pursue the objects of their own desires without any regard to how the other parts of the soul are affected (442c). Thus, for one to practice moderation or self-control, the rational part of one's

²⁰ Klosko 1988, p. 343.

soul must ensure that the soul as a whole “is never prevented by irrational impulses from obtaining, and making intelligent use of, whatever resources are required for optimally satisfying its appetitive and spirited desires.”²¹ Ideally, reason does so by developing standards that are based on the moral and ethical truths discovered by the guardians and instantiated through the city’s educational program, and it motivates the soul to act in accordance with these practical judgements through rational persuasion.

Although philosophic soul-types are concerned with the ordering of desires because they’re supposed to be moderate, the hydraulic effect produces a natural disposition of temperance towards unnecessary and useless desires and pleasures, so reason spends less effort in subduing appetitive and spirited desires than it does in pursuing wisdom. Whereas the rational part of the soul in philosophic soul-types has an inherent desire to pursue wisdom, which eventually leads them to question the sources of the values, beliefs, and desires that have been inculcated in them from their education and upbringing, reason in non-philosophic souls lacks this erotic desire for truth; instead of being self-critical and reflecting on the sources of familiar beliefs, values, and attitudes, non-philosophic souls are content to take them as given. I consider the functioning of reason in ordering the desires of spirit and appetite to be a form of lower-level rationality because all that is really demanded of reason in doing so is the capacity to generate “desires and aversions on the basis of practical beliefs and bits of reasoning about ‘better and worse,’ however flawed and inadequate they may be.”²² Even then, I don’t think it’s necessary for reason to actively engage in

²¹ Klosko 1988, p. 343.

²² Lorenz 2006, p. 155.

reasoning about ‘better and worse’ for it to produce a countervailing force whenever the soul is pulled towards the non-rational desires of spirit and appetite. For example, in the example of the thirsty man who experiences psychological conflict regarding whether to drink water, we can conceive of the impulse generated by reason not to drink seawater as an immediate, reflexive response to the initial stimulus generated by appetite rather than a calculated, reasoned moral decision. Even Socrates’ description of how “there is something in [his] soul, bidding [him] to drink, and something different, forbidding [his] to do so, that overrules the thing that bids” seems to characterize the rational desire not to drink seawater as a feeling or impulse rather than as a product of calculation (439c). Thus, reason’s function as ordering the non-rational desires of spirit and appetite so as to produce moderation in the soul can be thought of as a lower form of rationality than reason’s function in philosophic souls.

§5. The Necessity for Reason to Rule in the Souls of Producers

If non-philosophic souls, particularly the producers in the *kallipolis*, aren’t ideally rational, then does this preclude them from living justly? There’s a convincing view that the producers must be ruled by their appetites and thus possess appetitive souls because the appetitive part of the soul desires money as instrumental for the satisfaction of bodily and psychic pleasure and the function of producers is primarily concerned with the activity of moneymaking and the satisfaction of the city’s material needs (435e, 463d). Indeed, the very same “iron and bronze types [are said to] pull the constitution towards money-making and the acquisition of land, houses, gold, and silver” when the *kallipolis* begins to decay into a timocracy (547b). Furthermore, in

drawing the city-soul analogy, Socrates identifies appetite as the analogue to the producers, which seems to suggest that the appetite is the dominant, ruling part of their souls in the same way that reason and spirit seem to be most prominent in the souls of true guardians and auxiliaries.

However, I want to push back against this view, for the entire political project of the *kallipolis* would fail to be feasible if this were true. One reason for thinking this is that the *kallipolis* is set up without tort laws in place regulating matters concerning “market business, such as the private contracts people make with one another in the marketplace. . . contracts with manual laborers, cases of insult or injury. . . the payment and assessment of whatever dues are necessary in markets and harbors” (425e). Instead, Socrates believes that it simply “follow[s] automatically from the ways of life we established” that there wouldn’t ever be such improper conduct taking place, at least not amongst citizens of the *kallipolis*, because they’ve been educated and brought up properly as virtuous citizens (427a). By inference, his claim entails that producers would either be virtuous citizens or would act virtuously in their business dealings, since the producers are the ones who must engage in market business as wage-earners and profit-makers. It doesn’t seem possible that producers ruled by appetitive souls would be able to regulate their own conduct such that they’re acting virtuously. Rather, any lasting and stable sense of self-control or moderation over appetitive desires requires that reason directly rule over spirit and appetite, perhaps as some lower-level form of rationality. Furthermore, when we consider how the true guardians rule over the rest of the citizens in the city, it isn’t through forcing “citizens not to disturb the city’s whole political establishment on

pain of death,” for doing so would preclude the possibility for the civic virtue of moderation to exist in the city, since it necessitates that the producers freely consent to and endorse the rule of the philosophers (426b). Thus, the producers in the *kallipolis* can’t possess purely appetitive souls – even the ones found in an oligarchy – because they are supposed to “recognize and react appropriately to the material needs of the city and behave in an appropriately moderate fashion without constant supervision.”²³ It appears as though we’re presented with a rather puzzling situation here; the producers must be skilled at making money if they’re to fulfill their function in the city well, yet their souls must still be ruled by reason and be responsive to ethical norms and rational goods like the virtue of moderation if they’re to be just citizens in the *kallipolis*. Nevertheless, I think there’s a potential resolution to this problem to be found if we take a closer look at the relationship between the values of the city and those of the individual citizen.

§6. Moderation is the Primary Virtue of Producers

This relationship can be seen most clearly in the successive devolution of the *kallipolis* into various types of constitution. The first level of devolution is from the *kallipolis* into a timocracy, which is marked as a sort of intermediate stage in-between an aristocracy and an oligarchy. Since the rulers of a timocracy are led by spirit instead of reason, the primary objects of their desires are the same as those of spirit; “namely, the love of victory and the love of honor” (548c). The essential point here is that the transformation of the values of the rulers of the constitution are reflected in a change in the city’s institutions and thus the values of the citizens, so the timocratic

²³ Jeon 2014, p. 193.

citizen “resembles the corresponding city” in valuing honor, victory, and warfare as the highest goods and pursuing them as the primary objects of their spirited desires (549b). However, a timocracy doesn’t last for long as it quickly devolves into an oligarchy. This transformation occurs when the rulers’ appetites grow so large that they can no longer control their appetitive desires just by pursuing them in private life. Instead, they resort to changing the laws, breaking the ones that inconvenience them and thereby eroding the civic virtues of justice and moderation, and finally passing laws that favor the rich so that the city “gets its rulers on the basis of property assessment” (552e). The oligarchic citizen, now being ruled by the appetitive part of his soul instead of the spirited part, attaches the greatest importance to money (554a). Although the oligarchic city as a whole openly pursues appetitive desires, it doesn’t seem as though the oligarchic citizen is completely slavish to his appetite, for he is a “a thrifty worker. . . who makes a profit from everything and hoards it. . . satisfies only his necessary appetites, makes no other expenditures, and enslaves his other desires as vain” (554ab). Instead of living a life of luxury that we might expect of the appetitive soul who uses money as instrumental for the satisfaction of appetitive desires, it appears the oligarch soul-type values money as its own end, even going as far as to restrain his unnecessary and useless desires so that he can accumulate as much money as possible. Socrates illustrates the internal constitution of the oligarchic soul as erecting the appetitive part of the soul as a “great king within himself [and] adorning it with golden tiaras and collars and girding it with Persian swords” (543c). In doing so, the oligarchic soul-type has to exercise some degree of self-control over his desires; if we take a look at his soul, we see that he has reduced reason and spirit

to slaves, not allowing the “first to reason about or examine anything except how a little money can be made into great wealth” (543d). That is, he uses the rational part of the soul only to think about strategies for wealth-maximization in addition to subduing unnecessary and useless desires. Although the oligarchic soul-type might not be considered “rational” under Plato’s view of reason, it can be conceived of as an approximation of *homo economicus*, which is a concept in economic theories which assumes that individual agents are always rational actors; ‘rational’ in that they always act in a manner that maximizes their utility as efficiently as possible.

Should we then think of the producer in the *kallipolis* as possessing an oligarchic soul? There’s a compelling case to be made here, for the oligarchic citizen’s use of reason for wealth maximization would certainly enable the producer to perform his function as a profit-maker in the city very well, and it appears as though the oligarchic soul even possesses the virtue of moderation to some degree because he exercises self-control by taming some of his unnecessary and useless desires. I think it would certainly be possible, perhaps even likely that the producer and the oligarchic soul-type could reason similarly regarding the most efficient strategies for maximizing profit, provided that these strategies wouldn’t involve the cheating of contracts and other types of improper conduct. However, the main difference in the profit-making of the producer in the *kallipolis* versus the oligarchic citizen is that the producer pursues money as an instrument with which to benefit the entire city, not just his own appetitive ends. In fact, it’s even possible for the producer to hate the activities related to profit-making and disdain those who are greedy while still being very efficient at generating as much money as he can.

The reason for thinking this comes from Socrates' argument for the philosopher to rule the *kallipolis*; he first establishes that there's no other "life that despises political rule besides that of the true philosopher" (521ab). Despite the true philosopher's disdain for politics, it's apparent that he's the most qualified to rule the city well because it's only the true philosophers "who have the best understanding of what matters for good government" (521b). From this, we see that the true philosophers are skilled craftsmen of ruling even if they dislike politics and all of its associations; in fact, their disdain for power makes them even better rulers, for it increases the probability that they will use political power as an instrument for the betterment of the city as a whole instead of furthering own ambitions and satisfying their own desires. Thus, it's possible for producers to use their reason to think about strategies for profit-maximization without possessing appetitive souls and being money-lovers.

Furthermore, there is reason for thinking that the semblance of self-control that the oligarchic soul-type seems to possess is inherently unstable because he only "holds. . . other evil appetites. . . in check, not by persuading them that it's better not to act on them or taming them with arguments, but by compulsion and fear, trembling for his other possessions" (554d). That is, since the suppression of desires is achieved through force instead of rational persuasion or coming to a common agreement about which part of the soul should rule, the oligarchic soul is – like the oligarchic city – really two separate parts. Indeed, it's because of the oligarchic soul's "lack of education [that] the dronish appetites—some beggarly and others evil—exist in him"; the corollary of this is that, if the oligarchic soul had received a proper ethical

education and saw that the civic virtues of the *kallipolis* and the beliefs, values, and attitudes of the guardians were socially reinforced, he wouldn't have to subdue his evil appetites by force because they either wouldn't exist at all or they would be tamed in such a manner that they wouldn't attempt to rebel against the rule of reason (554c). What exactly this kind of ethical education would entail is something that I'll expand on later in chapter 3, but the point here is that any subjection of unnecessary and useless appetitive desires within the oligarchic soul is merely temporary, for there's a persistent, looming threat that civil war might erupt within his soul. Furthermore, even if we grant that it's possible for producers to possess oligarchic souls that could subdue and control unnecessary and useless desires in a stable manner, the producers would still somehow have to be taught "that excessive greed is shameful but that moderate greed is not."²⁴ That is, the producers would have to be taught to "love money without becoming too money-loving, and to love money while at the same time disdaining those who love it too much."²⁵ This type of 'moderate greed' just doesn't seem to be possible for an oligarchic soul since it values money above all else, seeking any possible way to maximize its wealth; if the oligarchic soul-type were to be educated this way, he would essentially be living in perpetual state of cognitive dissonance, his rational desires constantly pulling him one way while his non-rational desires do so in another – his soul would be in a state of constant civil war. Since it is "impossible for a city to honor wealth and at the same time for its citizens to acquire moderation, [as] one or the other is inevitably neglected," the producers in the *kallipolis* would not possess oligarchic souls or be

²⁴ Jeon 2014, p. 190.

²⁵ Ibid.

ruled by their appetites (555d). Thus, the primary good of producers is not the pursuit of wealth.

The most important thing we should take note of here is the point that the goods that the individual citizen pursues and the beliefs, values, and attitudes he holds are inseparable from and causally interrelated to those of the city of which he is a part. In the two cases we've seen so far from the transformation of the *kallipolis* to a timocracy and the timocracy to the oligarchy, we see that the changes in the values that the city holds and thus the good that the city pursues as a whole is initiated by changes in the beliefs, values, and attitudes held by the city's rulers that are further reproduced and modified in more extreme ways by the city's citizens. Consider, for example, the oligarchy; the changes in the beliefs, values, and attitudes in the city's rulers from the virtues of honor, victory, and warfare to the maximization of wealth causes a change in the good that the city pursues. It's important to recognize that, even if the rulers aren't explicitly aware of the changes occurring within their value systems, once they "pass a law so that only the rich can wield political power, we cannot deny that they formed the deliberate value judgement that money is the best thing there is."²⁶ That is, the rulers have, in modifying and shaping the institutions of the city such that it suits the pursuit of their own appetitive ends, endorsed these ends as what is good for them and thus what is good for the whole city. In fact, Socrates says as much when he claims that the oligarchy's "insatiable desire to attain what it has set before itself as the good, namely, the need to become as rich as possible" is the main factor in its devolution into a democracy (555b).

²⁶ Jeon 2014, p. 198.

Crucially, we should also recognize that, when Socrates claims that the rulers and citizens in an oligarchic constitution are motivated by the maximization of wealth, it's not analogous in meaning to the motivations of the philosopher rulers in the *kallipolis*, which "is to see that the city as a whole has the greatest happiness" – in analogous terms, to optimize happiness (519de). The reason for this is that the rulers and the citizens of the oligarchy only seek to each maximize his own private wealth; neither the rulers nor the citizens seek to increase the wealth of the city as whole, or to ensure that every other citizen can become wealthy. For example, the oligarchic constitution allows for the existence of 'drones'; impoverished beggars who lack "discipline from spending and wasting their wealth" and thus remain easy targets for being preyed upon by money-lenders (555c). Furthermore, though the citizens share the same beliefs, values, and attitudes as the rulers of the cities, they modify those beliefs and values even further; we see this when the timocratic youth's family suggests to him that the civic virtue of moderation isn't something that's honorable or that he should exact revenge on behalf of his father's cowardice. Indeed, it's through physical reproduction, whereby a new generation of youth are brought up who have had no prolonged exposure or attachment to the previous values of the city, that the modified, more extreme beliefs, values, and attitudes are solidified within the city, leading to further change and even more instability. The corruption or modification of the *kallipolis'* institutions and values, which – being informed by the Form of the Good and instantiated by philosophers who are ideally rational – are the closest approximations to objective perfection in the visible realm, allows for the possibility of "a city and its citizens exchang[ing] values. . . that are both personal and

political. . . as they interact with one another.”²⁷ What we can therefore conclude from this causal relationship is that “the citizen’s predilections towards certain goods cannot be conceived as distinct from the virtues of the city as a whole.”²⁸ With this principle in mind, we can apply it to our present concern with the producers in the *kallipolis*.

We can state our claim more clearly now: the personal good that the producers pursue is the same good that the entire *kallipolis* pursues, which is the civic virtue of moderation. In *Republic IV*, Socrates attributes the civic virtue of wisdom to the true guardians who rule the city, courage to the guardians who serve as auxiliaries, but curiously decides to attribute moderation to the entire city instead of attributing this virtue to just the producers, whose souls seem to be the ones that are most in need of moderation. To understand why, we need to trace over the previous steps we’ve taken in describing moderation and bring out its importance to the city more explicitly. Socrates first understands moderation as “a kind of order, the mastery of certain kinds of pleasures and desires . . . indicate[d] by the phrase ‘self-control’” (430d). With the framework of understanding how various motivations are produced in the soul whenever one part of the soul rules over the others and pursues its own good, Socrates explains that the phrase ‘self-control’ is an expression that indicates a condition in the soul wherein the “better part [of the soul] is in control of the worse”; that is, when reason rules over spirit and appetite (431a). Analogously, we find in the *kallipolis* that “the desires of the inferior many are controlled by the wisdom and desires of the superior few. . . desires that are simple, measured, and directed by

²⁷ Jeon 2014, p. 202.

²⁸ Jeon 2014, p. 197.

calculation in accordance with understanding and correct belief” (431c). Thus, to be moderate or self-controlled is to be in a state whereby reason rules over the spirited and appetitive elements, for only reason understands not only what is truly good for the entire constitution but also the goods that each element should actually pursue.

In fact, philosophic souls must themselves exercise self-control despite being naturally temperate by restraining the desires of reason from continuing to contemplate the Forms so that they can properly function as guardians and rule over the city. Furthermore, the rule of reason in this constitution is stable because “the ruler and the ruled. . . share the same belief about who should rule”; that is, the naturally worse elements of the constitution – spirit and appetite – consent to and endorse the rule of reason as a result of being rationally persuaded through argument and turned towards the light of reason through education (431e). Since the *kallipolis* as a whole pursues the civic virtue of moderation, values harmony between the rational, spirited, and appetitive elements, and believes that this state is best achieved through rational persuasion rather than force, the citizens of the *kallipolis*, including the producers, also pursue moderation within their souls and share in the same beliefs and values about how best to achieve it. For the producers to possess the virtue of moderation at all, “they must at least behave as if they are genuinely moderate. . . [and they] must have genuinely moderate values and aspirations.”²⁹ How then are producers able to design their lives “around attaining a rational good without desiring or possessing philosophical knowledge?”³⁰ As I’ll explain later in chapter 3, this must involve developing an educational curriculum for the producers that enables

²⁹ Jeon 2014, p. 202.

³⁰ Ibid.

them to engage the rational part of their soul in a more substantive way than merely being able to respond to the impulses and desires generated by spirit and appetite.

Conclusion

My main objective in this chapter has been to set up the interpretative framework of Plato's conception of rationality that will inform my argument in the following chapters. I have suggested that there are two ways in which we can think of reason's function or rule in the soul. The first is that of subduing the unnecessary and useless desires of spirit and appetite and rationally persuading them to both pursue the proper objects of their desires and to do so in a way that accords with standards that reason either develops by itself through calculating about 'better or worse' or is sourced externally. I consider this functioning of reason as a type of lower-level or ersatz rationality because it's possible to conceive of the impulses generated by the rational part of the soul to motivate the soul to act in a reasonable way as a reflexive response that manifests itself as a feeling rather than as the product of an explicit, reasoned moral decision. This functioning of reason can be found in souls generally because it enables people to act moderately, to be able to practice self-control over their appetitive and spirited desires; as a result, "the ordered, harmonious condition of [the moderate, just] soul is analogous to health in the body and is. . . important for happiness."³¹ However, reason functions differently in philosophic soul-types because reason has an erotic desire for truth (490a-c), so it directs the entire soul towards pursuing the object of its desires in addition to subduing the desires of spirit and appetite. Since philosophic soul-types also possess natural virtues that make them

³¹ Klosko 1988, p. 342.

naturally temperate, reason's desire for truth exerts a hydraulic effort whereby psychic energy is channeled towards the pursuit of wisdom instead of appetitive and spirited desires. Furthermore, because philosophic soul-types are naturally curious and have a desire to learn about what is really just, courageous, fine, virtuous, etc., they're able to reflect on the sources of the beliefs, values, and attitudes that they have been inculcated with in their education by seeing how they're connected to the Form of the Good – unlike non-philosophic soul-types. This wisdom allows them to fully endorse the beliefs and values developed by the guardians in addition to enabling them to make practical judgements as future philosopher rulers in defending the city's institutions from interference and perhaps making necessary adaptations through time. The capacity for one's reason to pursue truth, with which it has a kinship, reflect on beliefs and values, and reason about the Forms through dialectic is what it means to be ideally rational on Plato's account.

However, that there are only an elite few in the *kallipolis* who can be considered ideally rational doesn't preclude the possibility for producers to also live just lives and to be ruled by the rational part of their souls. Even though the function of the producers is to make money and provide for the material needs of the entire city, they can't be ruled by their appetites or possess souls that resemble the oligarchic soul-type because moderation is a civic virtue that's spread throughout the city, and those who are ruled by their appetites cannot practice moderation or exercise self-control. To be responsive to ethical norms and the rational goods developed by the guardians, the producers must be ruled by their reason. Thus, the producers can be considered sub-rational in that the rational part of their soul subdues the unnecessary

and useless desires of spirit and appetite and pursues the rational desires through standards developed by the guardians. Furthermore, since a citizen of a city pursues the same object that the city as a whole is said to pursue, I consider moderation to be the primary virtue of the producers. The theme of moderation and the possibilities for the producers to be moderate will be key ideas throughout the following chapters.

Chapter Two: The Embodied Soul and Challenges to Reason

Introduction

My aim in this chapter is to introduce the notion of cognitive biases and fallacious reasoning as innate flaws of our cognitive capacities. I'll be introducing these issues through the framework of a dual-process theory of judgement; although researchers like Jonathan Evans and Keith Stanovich have been enormously influential in developing and articulating the dual process theory, I'll be relying heavily on Daniel Kahneman's account of dual process theory because I see his articulation of System 1 functioning as intuition and that of System 2 as reasoning as being compatible with the rhetoric that Plato uses to describe the different parts of the soul.³² I'll characterize both System 1 and System 2 before moving on to explain how structures of both systems can together contribute to fallacious reasoning or reasoning that's affected by cognitive and heuristic biases, of which I'll give a few archetypical examples.

After introducing Kahneman's work as well as some of the research on heuristics and biases that has been conducted by several social psychologists, I'll move on to explain how a dual-process theory of judgement can be found in Plato's conception of the soul as articulated in *Republic X*. I'll consider how the two accounts of the soul that we find in *Republic IV* (where the soul is divided into reason, spirit, and appetite) and *Republic X* (where the soul is divided into rational and non-rational parts) are actually compatible with each other, in part by deferring to Jessica Moss' account of this problem. I will go on to suggest how the rational part of

³² See Evans (1984) and Evans and Stanovich (2013)

the soul – which relies on calculation and measurement – can be characterized as System 2 processing, whereas the non-rational part of the soul that relies on sense-perception, intuition, and feelings can be characterized as System 1 processing.

§7. An Introduction to the Dual-Process Theory of Judgement

Take a look at the questions and phrases below and try to complete them as quickly as possible.

2+2 = ?
 What is the capital of France?
 “War and _____”

I would hazard a guess and say that it probably didn't take you very much time to answer these problems. You were probably thinking of the answers to each problem before you finished reading each individual character; it must have seemed almost automatic to think of '4', Paris', or 'Peace' just by looking at the questions. Take note of that feeling of immediacy in your response to these questions, because it's our first explicit instance of intuitive thinking.

Now take a look at another problem and try to solve it as quickly as you did the questions above.

$17 \times 24 = ?$ ³³

It's highly unlikely that you knew the answer to this problem with the same immediacy as you did the prior questions. Take some time now and try to manually solve this problem with some scratch paper and a pen before going on. Now that you have a number in front of you, think about the conscious mental steps you took to solve this problem. You first probably had to remember that multiplication rule that

³³ Kahneman 2011, p. 20.

applies when you're trying to multiply two digits; first multiplying seven, then multiplying one by four and then doing the same to two. Then, you had to keep track of all the numbers that get carried over to the leading digit place when the multiplication results in a number greater than nine. This wasn't a particularly complex multiplication problem, but I want to focus on the fact that the process of solving this question was, as Daniel Kahneman puts it, "mental work: deliberate, effortful, and orderly – a prototype of slow thinking"³⁴ as opposed to the immediacy of intuitive thinking demonstrated in the preceding problem set.

Psychologists Keith Stanovich and Richard West developed the terms 'System 1' and 'System 2' to categorize the two different mental processes at work in each of the problem sets. Their work – along with Daniel Kahneman and Amos Tversky – points to a dual-process theory of judgement. That is, mental processing can generally be categorized into either System 1, which "operates automatically and quickly, with little or no effort and no sense of voluntary control. . . [or System 2], which "allocates attention to the effortful mental activities that demand it, including complex computations."³⁵ In more general terms, System 1 can be thought of as intuition and System 2 can be thought of as reasoning or reflection. In terms of a list of activities or processes that System 1 is associated with, we would expect that the general faculties of sense perception – such as that of sight – would be included; for example, our capacity for depth perception, tracking an object that moves quickly across our field of vision, or physically turning to the source of a loud, unexpected sound. Kahneman characterizes many of these types of automatic reactions as innate survival behaviors

³⁴ Kahneman 2011, p. 20.

³⁵ Kahneman 2011, p. 20-21.

that enable one to orient oneself in the world, identify potential sources of harm, and avoid losses.³⁶ However, other kinds of motor controls or even mental processes become automatic as a result of habituation and continued exposure; for example, there are many learned physical behaviors or skills that we seem to perform without conscious thought, from small gestures such as turning the driving wheel to moving along a slightly curved highway to highly skillful activity like dribbling a basketball. As we become more skilled at a task or habituated in some behavior, the demand for mental energy diminishes until these skills, habits, and behaviors eventually become automated processes of System 1.³⁷ For example, if you pick up a basketball for the first time and try to dribble the ball, you're likely to be intensely focusing on a host of different factors such as your hand placement, the force with which you dribble, the rhythm of your dribbling, and later combining all those motions with the movement patterns of your feet. Through enough time, practice, and perhaps natural talent, a professional basketball player requires far less physical energy and mental focus to perform the same activities; this tendency is what Kahneman calls the "law of least effort,"³⁸ and it applies to both cognitive and physical processes. Furthermore, if the first problem set was any indication, System 1 includes a wide range of mental and emotional tasks and behaviors, such as answering simple arithmetic problems, recalling slogans or phrases, or even matching stereotypes that all draw upon a broad knowledge base of language and culture that is "stored in memory and accessed without intention and without effort."³⁹ The automatic processes of System 1 are

³⁶ Kahneman 2011, p. 22.

³⁷ Kahneman 2011, p. 35.

³⁸ Kahneman 2011, p. 34.

³⁹ Kahneman 2011, p. 22.

enormously productive and enable us to function in our everyday lives – both as ancient humans struggling to survive on the African plains and as cyborgs in an urban jungle – by conserving cognitive and physical energy that’s available for more urgent tasks.

In contrast to System 1, the operations of System 2 are slow, effortful, and require attention and concentration. System 2 operations would include physical activities that require us to focus our attention, such as: driving down a precarious mountain road, looking for a familiar face in a crowded room, or waiting for an announcer to give the signal to start a race, as well as tasks that require fine motor skills or precision, such as archery. Similarly, the mental tasks and operations of System 2 would include activities that require calculation, measurement, and computation such as filling out a tax form or counting the occurrences of a single letter on a page of text, in addition to other tasks that require concentration, like thinking about a specific memory or idea or reading Heidegger. The key feature common to all tasks of System 2 processing is that “they require attention and are disrupted when attention is drawn away”⁴⁰; whereas System 1 processing enables us to multitask, System 2 tasks require that we concentrate our attention and focus on just a few activities or even a single activity at one time because we only have a limited capacity for attention. For example, a driver can casually talk with the passengers in his car while driving in light traffic on the highway at the same time as he’s changing music tracks on the center console, whereas performing these tasks while driving during rush hour and shifting several lanes to get to the exit would

⁴⁰ Kahneman 2011, p. 22.

severely detract from his driving competency. What we can conclude is that consistently focusing our attention on some activity “requires continuous exertion of at least some effort,”⁴¹ the tradeoff of which is that we sometimes unconsciously ignore and effectively become blind to factors that aren’t the current focus of our attention. Christopher Chabris and Daniel Simons demonstrated this in a now famous video featuring an experiment where participants were asked to count the number of passes made by group of people passing a basketball around; Chabris and Simons found that an overwhelming majority of people were so focused on this one task that they failed to notice a person in a gorilla suit walking through the group half-way through the exercise. However, this result wasn’t nearly as surprising to the researchers as were the reactions of the participants when they were told about the gorilla they had missed, as they could not “imagine missing such a striking event. . . [thus, the invisible gorilla study illustrates that] we can be blind to the obvious, and we are also blind to our blindness”⁴² even when we’re engaged in the slow, effortful, focused tasks of System 2.

We should keep in mind that, although Systems 1 and 2 are general categories that capture different sets of mental processes or activities, the two systems are often working cooperatively, as System 1 is primarily “originating impressions and feelings that are the main sources of the explicit beliefs and deliberate choices of System 2.”⁴³ Furthermore, even though Systems 1 and 2 are both active when we’re conscious, Kahneman claims that “System 1 runs automatically and System 2 is normally in a

⁴¹ Kahneman 2011, p. 23.

⁴² Kahneman 2011, p. 24.

⁴³ Kahneman 2011, p. 21.

comfortable low-effort mode. . . most of the time System 2 adopts the suggestions of System 1 with little or no modification”⁴⁴ since many of our daily tasks can be accomplished without significantly engaging our effortful, focused attention. However, System 2 still has the capacity “to change the way System 1 works by programming the normally automatic functions of attention and memory.”⁴⁵ This capability of System 2 is what Kahneman calls “the adoption of ‘ask sets’: it can program memory to obey an instruction that overrides habitual responses.”⁴⁶ For example, you can change the way you typically read by trying to focus on certain words that begin with a specific letter such as ‘N’ or that are italicized; over time and with enough practice, this skill or activity becomes another System 1 process, such that these kinds of words will seem to pop out at you even if you’re just glancing at a page .

However, when System 1 encounters a problem or task that it cannot solve on its own – such as the multiplication problem shown earlier – it engages the processes of System 2 to focus its attention and search for a specific memory or perform a calculation or think of an argument. Indeed, some cognitive and physical operations are simply more demanding and thus require more effortful attention than others; we would expect that System 2 would be engaged when you’re rehearsing a public speech or choosing an apartment to rent because “System 2 is the only one that can follow rules, compare objects on several attributes, and make deliberate choices between options.”⁴⁷ Although System 1 can draw upon a broad base of knowledge

⁴⁴ Kahneman 2011, p. 24.

⁴⁵ Kahneman 2011, p. 23.

⁴⁶ Kahneman 2011, p. 36.

⁴⁷ Ibid.

and make associations, integrate information about, and form simple relations among concepts, it cannot “deal with multiple distinct topics at once, nor is it adept at using purely statistical information.”⁴⁸ Conflicts between the two systems occur when System 2 overrules some process of System 1. For example, think about a past occurrence in a social setting where you might have blurted out something that someone might have interpreted as being offensive or awkward, but you stopped yourself just in time; while your System 1 was giving the typical, innocuous answers to the types of questions one encounters in small talk, your System 2 was continuously monitoring your behavior at a low level of effort – which is why you probably don’t feel very self-conscious when asked about the weather. It was when it detected that an error was about to be made by System 1 that System 2 suddenly leapt into action. The interactions between Systems 1 and 2 are optimized for efficient performance, and we can usually rely on System 1 because it’s “generally very good at what it does: its models of familiar situations are accurate, its short-term predictions are usually accurate as well, and its initial reactions to challenges are swift and generally appropriate.”⁴⁹ At the same time, System 1’s capabilities to do all this leaves it open to the risk of producing cognitive biases, which are errors that can go unnoticed by System 2.

§8. System 2: Ego Depletion and Cognitive Strain

System 2 is prone to letting the errors of System 1 slip by because System 2 is lazy and is averse to the mental effort of focusing its attention on a problem or task. Maintaining a coherent train of thought, brainstorming ideas, reading closely, and all

⁴⁸ Kahneman 2011, p. 36.

⁴⁹ Kahneman 2011, p. 25.

other types of System 2 processes require effortful thinking in addition to a healthy dose of self-control. Simply put, trying to maintain our focus and attention for an extended period of time on these tasks can feel exhausting, especially because there are plenty of distractions that threaten to pull our attention away. Thus, what we can see is that “self-control and deliberate thought are both. . . forms of mental work [that]. . . draw on the same limited budget of effort.”⁵⁰ Roy Baumeister conducted a series of experiments that tried to test the consequences of this idea; what he found was that, “in a typical demonstration, participants who were instructed to stifle their emotional reaction to an emotionally charged film will later perform poorly on a test of physical stamina.”⁵¹ The mental effort required to stifle one’s emotional responses essentially depleted the pool of mental effort available for participants to exercise self-control in the second task they were assigned; Baumeister termed this phenomenon “ego depletion.” Thus, we can see that activities “that impose high demands on System 2. . . all involve conflict and the need to suppress a natural tendency. . . and the exertion of self-control is depleting and unpleasant.”⁵² One implication we can draw from Baumeister’s findings is the effect that ego depletion can have on our ability to form judgements; it suggests, at the very least, that if someone is tasked with making judgements or evaluations throughout a series of cognitively demanding tasks, there’s a possibility that his System 2 will expend less effort, focus, and attention on the tasks that come later and that the quality of evaluation or judgement will suffer as a result. Self-control or the practice of

⁵⁰ Kahneman 2011, p. 40.

⁵¹ Kahneman 2011, p. 43.

⁵² Kahneman 2011, p. 42.

moderation is essential to sustain a high standard of performance in cognitively demanding System 2 tasks; by practicing moderation, we might mitigate or avoid the lapse in judgement and attention that might otherwise occur when one is hungry or tired.

I suggested earlier that System 2 is always active even when we're primarily using System 1 in our average, everyday tasks that don't require focused attention and concentration. That is, the main function of System 2 when it's running in the background "is to monitor and control thoughts and actions 'suggested' by System 1, allowing some to be expressed directly in behavior and suppressing or modifying others."⁵³ However, in what kinds of instances does System 2's control over System 1 seem to weaken, such that it produces errors? We have one possible instance in the example of ego depletion, but are there other instances that don't require us to be engaged in a series of cognitively demanding tasks?

Before I go on, take a look at the problem below and answer with the first number that comes to mind:

A bat and ball cost \$1.10.
The bat costs one dollar more than the ball.
How much does the ball cost?⁵⁴

It's highly likely that the answer that came to your mind was 10 cents; if it was, then you came to the same answer as an overwhelming majority of people who see this question. Unfortunately, that answer would also be wrong. Consider this: if the ball costs 10 cents and the bat costs a dollar more, then the bat would be \$1.10, and the two numbers added together would be \$1.20, ten cents more than what the

⁵³ Kahneman 2011, p. 44.

⁵⁴ Ibid.

problem stated the combined cost was. Instead, the correct answer is that the ball costs five cents, so when you add that to the cost of the bat – \$1.05 – you get the original combined cost. What this suggests is that there are instances where System 2 will endorse “an intuitive answer that it could have rejected with a small investment of effort.”⁵⁵ And this indicates that System 2 might be too lax in monitoring the suggestions of intuition in the absence of some motivation or incentive. For example, if you were asked to solve the same problem within 30 seconds for a large cash prize, you’d probably double or triple-check your answer and thereby catch the error.

Whenever we do have to actively engage our System 2 to analyze a problem, the somewhat unpleasant experience of exerting mental effort involved in doing so is what Kahneman calls cognitive strain. We can either consciously put ourselves in a state of cognitive strain through willpower or experience cognitive strain incidentally. An example of the latter occurrence can be seen in an experiment conducted by Shane Frederick. In it, he administered the Cognitive Reflection Test – consisting of the bat-and-ball problem earlier and two other similar questions – to 40 students, but half of the tests were printed in a small font in a washed-out, gray print whereas the other half was printed for easy legibility. The results of the experiments showed that “90% of the students who saw the CRT in normal font made at least one mistake in the test, but the proportion dropped to 35% when the font was barely legible.”⁵⁶ When we’re trying to read something that isn’t clearly legible, we do so opening our eyes wider, which causes the pupil to dilate, a sign that we’ve directly engaged our System 2 to focus its attention and try to slow down and understand the text, and thus increase the

⁵⁵ Kahneman 2011, p. 44.

⁵⁶ Ibid.

likelihood that we catch the trick in the problems. Thus, when we're in a state of cognitive strain and focusing our attention on the task in front of us, we're "more likely to reject the intuitive answer suggested by System 1."⁵⁷ Since cognitive strain and ego depletion both cause us feelings of displeasure and discomfort, Kahneman concludes from the findings gathered from the ball-and-bat problem and other similar puzzle problems that the default state of the average person's System 2 is that of laziness and aversion to exerting mental effort.⁵⁸

We might note here a similarity between the feelings of pain, discomfort, and displeasure associated with engaging our System 2 or analytical reasoning capabilities and Socrates' description of the experience of the prisoner who ascends from the depths and darkness of the cave in *Republic VII*. In the first instance that the prisoner is compelled to look at the source of light inside the cave – the fire – we're told that his eyes would hurt and that he would "turn around and flee towards the things he's able to see, believing that they're really clearer than the ones he's being shown," and in the second instance when he's compelled to look at the light outside of the cave, the prisoner would again feel pain and irritation (515e). The experience of pain and discomfort that the prisoner feels when he looks at the sources of light seems to match what Kahneman calls cognitive strain; indeed, the act of moving from the shadows on the wall to the light from the fire represents the prisoner's movement along the Divided Line in *Republic VI* from ignorance to opinion, and then to knowledge, which requires greater engagement with the rational part of the soul, the experience of which Plato describe as painful and displeasing. Thus, the key here for

⁵⁷ Kahneman 2011, p. 44.

⁵⁸ Kahneman 2011, p. 46.

both Kahneman and Plato is for someone to actively engage the rational part of his soul or System 2 such that it's always actively monitoring the suggestions and impressions generated by System 1, which requires self-control or moderation to avoid succumbing to cognitive strain.

§9. System 1: Associative Activation and Cognitive Ease

Now that we've explored several of the ways in which System 2 can sometimes falter in monitoring the behaviors and impressions of System 1, we should take note of the specific capabilities that allow System 1 to be so enormously productive for our average, everyday tasks. One essential feature of System 1 that's essential for understanding language is the process of associative activation, when “ideas that have been evoked trigger many other ideas, in a spreading cascade of activity. . . each element is connected, and each supports and strengthens the others.”⁵⁹ For example, associative activation is at work when one sees the word ‘Paris’ and immediately thinks about existential philosophers, baguettes, or the Eiffel tower. What connects this “complex set of mental events is its coherence. . . [when associative activation yields] a self-reinforcing pattern of cognitive, emotional, and physical responses that is both diverse and integrated – it has been called associatively coherent.”⁶⁰

Another important feature of associative activation is that it doesn't activate all possibly related ideas simultaneously; the context in which the original word appears shapes the ideas that are both immediately brought forth and thought of afterwards – the latter phenomenon is called the priming effect. To demonstrate this,

⁵⁹ Kahneman 2011, p. 51.

⁶⁰ Kahneman 2011, p. 52.

if I ask you to think about the words ‘food’ and ‘eat’ and shortly thereafter ask you to complete the phrase SO_P, you’re much more likely to think of SOUP than of SOAP. Thinking about food or the activity of eating primes you to think about food-related items, whereas thinking about ‘wash’ or ‘clean’ would prime you to think about sanitary items and activities.⁶¹ However, since priming is a System 1 phenomenon, this means that System 2 doesn’t have direct access to the kinds of ideas, thoughts, and memories that orient someone with a specific disposition, which means that System 2 is presented with some difficulty in monitoring and modifying System 1 behavior. The implication of this is that our decision-making process can be influenced by factors that we are unconsciously aware of. For example, researchers in Arizona looked at contextual priming to see whether the physical location of voter’s polling site affected their assessment of policies; in a study of voting patterns in Arizona’s 2000 General Election, they found that “people who voted at schools were more likely to support the education funding initiative,”⁶² since the percentage of people who voted in schools who supported the measure increased to 56.02% from 53.99% of people who voted in other locations. This phenomenon also serves as the basis for many of the advertising techniques found across all media today; for example, many commercials use subliminal messaging – where images or phrases appear for a very brief moment – or advertise using product placement in movies and shows. What the priming effect demonstrates is that seemingly simple or trivial factors in our environments can lead us to alter our behavior, thoughts, beliefs, and attitudes without our conscious awareness, making it difficult for us to modify those

⁶¹ Kahneman 2011, p. 53.

⁶² Berger 2008, p. 8848.

beliefs.

If we think back to the feelings we experienced when answering the questions in the first problem set at the start of this chapter, the ease or comfort with which we were able to immediately answer those questions can be partly attributed to our familiarity with them. Kahneman describes such feelings as being indicative of cognitive ease; when you're "in a state of cognitive ease, you are probably in a good mood, like what you see, believe what you hear, trust your intuitions, and feel that the current situation is comfortably familiar."⁶³ That is, our feelings and dispositions can influence the way in which we interpret information. System 1, in providing the impressions and impulses that inform our choices and actions, does so by "offering a tacit interpretation of what happens to you and around you, linking the present with the recent past and with expectations about the near future."⁶⁴ The capacity for System 1 to engage in associative activation with such immediacy rests on its prior familiarity with ideas, a priming trigger, or even the way that certain ideas are presented; for example, with clear, medium-sized font on clean, white paper. At the same time, being in a state of cognitive ease makes it difficult for our System 2 to evaluate whether a statement or idea that we encounter is true because the feelings of familiarity and comfort we experience when we encounter something that is "strongly linked by association to other beliefs or preferences we hold, or comes from a source we trust and like"⁶⁵ might sway us from checking or give undue weight to ideas, beliefs, or experiences that are familiar, such as our own subjective experiences or the

⁶³ Kahneman 2011, p. 60.

⁶⁴ Kahneman 2011, p. 59.

⁶⁵ Kahneman 2011, p. 60.

experience and anecdotes we hear from others. Thus, our feelings of cognitive ease can produce the illusion of truth where it might not exist and lull System 2 into endorsing a behavior, thought, or belief that isn't entirely true. Even though we might want to think of ourselves as rational, autonomous agents, these studies seem to indicate that we lack control over how we form beliefs and values that translate into our choices.

I want to suggest that System 1's sensitivity to feelings, mood, and experience is similar to how the appetitive part of the soul is influenced by the passions in Plato. For example, in *Republic X*, Socrates claims that when people listen to one of the heroes in Homer's tragedy sorrowing, they "enjoy it . . . sympathiz[ing] with the hero [and] tak[ing] his sufferings seriously" (605c). The tragedies produced by imitative poets appeal to the inferior, non-rational part of the soul by gratifying its desires; "since it hasn't been adequately trained by reason or habit, relaxes its lamenting part when it is watching the sufferings of somebody else," and in times of private misfortune "hungers for the satisfaction of weeping and wailing, because it desires these things by nature" (605e). It's important to notice here how the description of the rational part of the soul letting its guard down seems rather similar to how Kahneman characterized System 2 as being lazy and averse to exerting mental effort and thus passively accepting the impressions of System 1. Thus, there's an indication here that, in both Kahneman's characterization of System 1 and Plato's characterization of appetite, there is some part of us that is subject to strong emotions, moods, and feelings that affect our decision-making abilities.

§10. Availability Heuristics and Plato's Theory of the Soul

One consequence of the associative activation used by System 1 is that it leads to the use of the availability heuristic, which can lead to fallacious decision-making. The availability heuristic is defined “as the process of judging frequency by the ease with which instances come to mind.”⁶⁶ Oftentimes, judging probability by representativeness can result in fairly accurate estimates and predictions; for example, “people with a PhD are more likely to subscribe to the *New York Times* than people who ended their education after high school.”⁶⁷ When we use the availability heuristic to make predictions in these types of cases, we can end up relying on stereotypes because they are familiar ideas that System 1 can easily recall. However, one of the biggest issues with representativeness “is an excessive willingness to predict the occurrence of unlikely events.”⁶⁸ For example, if you see someone on the MTA reading the *Times*, is there a greater probability that she has a PhD or is there a greater probability that she's only graduated from high school?⁶⁹ It's likely that you chose the first option; your System 1 is probably familiar with the idea that the *Times* has a slight liberal bent and that liberals tend to have higher-education degrees than do conservatives, especially in the Northeast. However, this answer would be wrong since “there are many more college nongraduates than PhDs riding in the New York subways”.⁷⁰ In substituting the representativeness – highly educated liberals can typically be found reading *The New York Times* – for the base rate, which would be

⁶⁶ Kahneman 2011, p. 129.

⁶⁷ Kahneman 2011, p. 151.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Kahneman 2011, p. 152.

the percentage of PhDs in the general population or the population of daily subway commuters in New York City, we end up with an overestimation. Another implication of using the availability heuristic is related to loss aversion, and it concerns how we perceive risk. For example, many people overestimate the risks of spectacular, dramatic events that they see on the news, such as dying from a plane crash or getting bitten by snake, even though the probability of dying from average, everyday activities like driving a car is much higher. In addition, we're biased to treat our own experiences or the experiences of those with whom we are familiar more weight because they are most immediately accessible to System 1. For example, if you, a family member, or a close friend was a passenger who was on US Airways Flight 1549 when it landed in the Hudson River, your traumatic experience or even hearing about second-hand accounts would heavily weigh on your decision to board a plane in the future, even if you knew that the probability of a plane crash is one in several millions. The availability heuristic thus skews our perception of risk, making us more likely to spend time, money, and effort preventing the deaths that occur from dramatic, spectacular, but rare circumstances while making us less aware of and thus less likely to reduce the larger risks of common, everyday activities we engage in.

The following case illustrates a final problem with availability heuristics, inspired by one of Amos and Kahneman's most famous experiments. Consider the following:

Linda is twenty-three years old, single, outspoken, and very bright. She graduated from Wesleyan University as an alum of the Class of 2017, she was a double-major in FGSS and Philosophy, and an inaugural member of the philosophy department's new Social Justice Track. As a student, she was deeply concerned with issues of discrimination and social justice and participated in protesting university divestment.

Given this information, rank the following possibilities, with 1 being most probable and 6 being least probable.

- Linda is active in the Women’s March and #MeToo movements.
- Linda works in a bookstore and takes yoga classes.
- Linda is a social worker.
- Linda is a bank teller.
- Linda is an insurance salesperson.
- Linda is a bank teller and is active in the feminist movement.⁷¹

Presumably, it didn’t take you very long to rank the first option as number 1, though “social worker” and “bookstore employee” might have been trading places between numbers two and three. The two items that surely don’t seem to match with what we’ve been told about Linda are ‘bank teller’ and ‘insurance salesperson’, so those two were probably trading places between numbers five and six. How about the item that we left out: feminist bank teller? Although Linda doesn’t fit the stereotype of ‘bank teller’, many people would agree that she fits ‘feminist bank teller’ better than just being an ordinary bank teller, who we assume to be ideologically neutral. But consider this: is the probability that Linda is a bank teller greater or less than the probability of her being a feminist bank teller? What Amos and Kahneman found when conducting this experiment with thousands of test subjects was that the overwhelming majority of participants chose ‘feminist bank teller’ – possibly for the aforementioned reason – and thereby committed the base rate fallacy.⁷² The reason ‘feminist bank teller’ is the incorrect response can be visualized using Venn diagrams; imagine that the set of all bank tellers is represented by just one circle. A specific instance of a bank teller – a feminist bank teller – is a much smaller circle

⁷¹ Kahneman 2011, p. 157.

⁷² Ibid.

within this larger circle, meaning that the probability that someone is a feminist bank teller is lower than the probability of just being an ordinary bank teller.⁷³ It's important to take note here that the wrong answer choice can still seem extremely attractive and intuitive even when we consciously recognize how and why it's incorrect.

Ultimately, what the Linda problem and other instances of the availability heuristic show us is that “the most coherent stories are not necessarily the most probable, but they are plausible, and. . . [these notions] are easily confused by the unwary. . . [leading to] pernicious effects on judgements.”⁷⁴ Whenever we give the intuitive but incorrect answer choices, the fault lies in both our System 1 and System 2, as “System 1 suggested the incorrect intuition, and System 2 endorsed it and expressed it in a judgement.”⁷⁵ Even if System 2 does not have direct control over how System 1 associatively activates certain ideas, memories, and beliefs when prompted by an anchor or a priming factor, there's always the possibility for System 2 to reject the information obtained by System 1 before forming a conclusion. However, rejecting an intuitive answer and challenging our feeling of confidence “requires a significant effort of self-monitoring and self-control,”⁷⁶ and the rational answer or choice can oftentimes still feel incorrect.

Thus, there are two main ways we've characterized the interactions between Systems 1 and 2. When it's engaged and focuses its attention, System 2 is “active in deliberate memory search, complex computations, planning, and choice. . . [has] the

⁷³ Kahneman 2011, p. 157.

⁷⁴ Ibid.

⁷⁵ Kahneman 2011, p. 153.

⁷⁶ Ibid.

ability to resist the suggestions of System 1, slow things down, and impose logical analysis.”⁷⁷ System 2 must also demonstrate considerable self-control and self-criticism in order to perform these at a consistent standard of performance because it must endure discomfort and displeasure and persist through hunger and fatigue. However, when System 2 is lazy, unfocused, and avoids cognitive strain, it gives “considerable leeway to System 1. . . [and acts] more or less as an acquiescent monitor.”⁷⁸ Though these are characterizations of the systems, there are ways in which people can also characterize themselves as being more like one system than other; for example, we frequently see people characterizing themselves or others as too impulsive and “rushing to judgement” as opposed to being more deliberative, analytical, and measured.

This does parallel in some ways how Plato’s motivational theory of the soul in the *Republic* assumes that the person who is ruled by one part of the soul pursues the good associated with it; for example, spirited souls pursue honor; philosophic souls pursue the truth; and appetitive souls pursue money. Although Plato was writing more than 2,000 years before Kahneman, it appears they both seem to be talking about reason and the average person’s engagement with reason in rather similar terms; this suggests that we can extend some of Kahneman’s insights into the mind to what Plato thinks about the rule of reason in the soul.

§11. System 1 and System 2 in the *Republic*

Though by now we are familiar from chapter 1 with Plato’s tripartition of the soul in *Republic IV*, I now want to raise an important interpretive issue that occurs in

⁷⁷ Kahneman 2011, p. 103.

⁷⁸ *Ibid.*

Republic X where Plato seems to speak of the soul as only being divided into two, its rational and non-rational parts. I want to suggest that Kahneman's insights into the cognitive biases and fallacies of System 1 and System 2 processing are in fact compatible with Plato's theory of the soul by suggesting that System 1 belongs to the non-rational part of the soul, as well as being a type of sense perception, and that System 2 can be thought of as the rational part of the soul. I also want to suggest that the two characterizations of soul division found in *Republic IV* and *X* are compatible with each other.

Plato first draws attention to the division of the soul into rational and non-rational parts in *Republic X* by noting how "the appearance of something can vary with the different perspectives we can have of it."⁷⁹ For example, an object in the distance appears smaller than it does if it were nearer to us, and straight objects in water appear crooked due to the refraction of light. Whenever we encounter these types of visual tricks and optical illusions, Socrates states that we use calculation, measurement, and weighing to get an accurate conception of the object and its properties (602de). The operations of calculation and measurement – the sorts of mathematical operations that one learns under the educational curriculum Socrates prescribes in *Republic VII* – are functions of the rational part of the soul. However, Socrates notes that sometimes when the rational part of the soul uses calculation and measurement to indicate "that some things are larger or smaller or the same size as others, the opposite appears to it at the same time" (602e). Since "the part of the soul that forms a belief contrary to the measurements couldn't be the same as the part that

⁷⁹ Singpurwalla 2011, p. 285.

believes in accord with them,” there must be two parts of the soul, and “the part that puts its trust in measurement and calculation is the best part of the soul. . . [whereas] the part that opposes it is one of the inferior parts in us” (602-603a). The rational part of the soul forms its attitudes or beliefs on the basis of calculation, and reason – belonging to the rational part of the soul – “forms its desires on the basis of calculating about what is good and bad,”⁸⁰ whereas the inferior or non-rational part of the soul forms its attitudes and beliefs on the basis of how objects appear. Note here how Socrates’ description of impressions generated by the inferior part of the soul seems to match the feelings of discomfort and perhaps unease when we’ve used System 2 to get a correct answer that goes against our natural, intuitive feelings; the subjective experience when the rational part of the soul uses calculation and measurement thus seems to describe cognitive strain.

Furthermore, if the inferior or non-rational part of the soul forms beliefs based on appearances, this means that the impressions it generates must come from the faculties of sense perception, meaning that it relies on sight and sound. Socrates in *Republic* VII divides sense perception into two categories, since “some sense perceptions don’t summon the understanding to look into them, because the judgment of sense perception is itself adequate, while others encourage it in every way to look into them, because sense perception seems to produce no sound result” (523ab). This aligns with what we know of System 1; just think back to the very first problem set at the start of this chapter and the ease with which you were able to complete simple phrases and sentences or calculate simple arithmetic problems. However, when

⁸⁰ Singpurwalla forthcoming, p. 6.

System 1 confronts a more complex mathematical problem, it has to engage with System 2 more directly to exert mental effort and use a logical or analytical approach to calculate and measure something precisely. Thus, it's apparent that the superior or rational part of the soul Socrates describes can be characterized as System 2, which applies calculation and measurement to appearances, whereas the inferior or non-rational part of the soul can be characterized as System 1. Thus, the various cognitive biases and fallacies Kahneman presents can be found in the judgements of sense perception when it doesn't summon understanding.

§12. Soul Division in *Republic IV* and *Republic X*

What then should we make of the difference in how Plato describes soul division between *Republic IV* and *Republic X*? Scholars like Alexander Nehamas and Julia Annas have pointed out that it would seem strange to categorize appetite and spirit as belonging to the inferior, non-rational part of the soul because it isn't clear that there's a connection between the capacity for the non-rational part of the soul to form beliefs, values, and attitudes based on appearances and the desires of spirit and appetite.⁸¹ As Nehamas puts it: "why should our desire tell us that the immersed stick is bent?"⁸² Thus, instead of categorizing the entire soul itself into non-rational and rational parts, these scholars advance the notion that the rational part is itself divided into two capacities: the capacity to apply calculation and measurement to appearances and the capacity to use the faculties of sense perception to receive appearances of things. The rational part of the soul would thus have superior and inferior parts.

However, I don't think that the text supports this theory of a division in the

⁸¹ See Nehamas (1999) and Annas (1981)

⁸² Nehamas 1999, p. 265.

rational part of the soul, and to see why we have to consider what Socrates says about the nature of the embodied soul. In *Republic X*, Socrates states that “to see the soul as it is in truth, we must not study it as it is while it is maimed by its association with the body and other evils. . . but in its pure state. . . by means of logical reasoning” (611c). This implies that the tripartite theory of the soul developed in *Republic IV* is only an accurate depiction of the soul “as it appears at present. . . but the condition in which we’ve studied it is like that of the sea god Glaucus. . . some of the original parts have been broken off, others have been crushed, and his whole body has been maimed by the waves and by the shells” (611d). The true nature of the disembodied soul can be identified with reason since it possesses a love for wisdom, making it “akin to the divine and immortal and what always is” (611e). If reason were to have superior and inferior parts as some scholars claim it does, then it wouldn’t be akin to the divine and immortal; since the inferior part of the soul is said to go against the judgements of the superior part of the soul, the disembodied soul would essentially experience cognitive dissonance – it would be varied and contradictory as opposed to being stable and resistant to change. Thus, the features of the embodied soul Socrates refers to are spirit and appetite, which also comprise the inferior or non-rational part of the soul, for the desires possessed by both these parts are fundamental to an embodied soul “immersed in human life” (612a).

However, this doesn’t fully answer the concern held by Annas and Nehamas, as there still seems to be a missing link connecting the motivational aspect of the soul concerned with desires, beliefs, and values and its cognitive capacities, which are concerned with forming beliefs from the appearances of things. Since spirit and

appetite both belong to the non-rational part of the soul, their desires are formed “solely on the basis of what seems or appears good or bad, without subjecting those appearances to scrutiny,”⁸³ whereas the rational part of the soul can, through calculation, “grasp what is truly good or bad, as opposed to what merely appears so.”⁸⁴ As Jessica Moss frames it, “the category of appearances includes not only straightforward sensory appearances such as that a stick is straight or bent. . . but also evaluative appearances such as that pastries are good or an insult is bad.”⁸⁵ As a result, “to say that the appetitive part sees the stick as bent. . . means that one and the same susceptibility to appearances explains both our perception of the stick and our appetites for pleasure.”⁸⁶ However, we cannot conclude from this that the motivational outlooks possessed by spirit and appetite toward the objects of their desires can be explained solely in terms of the cognitive capacity to form attitudes or beliefs on the basis of appearances, for this fails to explain why spirit desires the fine or honorable or why appetite desires sensory pleasures. That is, “for something to appear good. . . then it seems there is something about each part that is already positively attuned to and attracted to the relevant objects, independently of the tendency to form beliefs and desires on the basis of appearances.”⁸⁷ Rather, we must explain how the tendencies of these parts of the soul to desire particular objects is somehow fundamental or essential to the natures of those parts of the soul.

⁸³ Singpurwalla forthcoming, p. 6.

⁸⁴ Moss 2008, p. 39.

⁸⁵ Ibid.

⁸⁶ Moss 2008, p. 40.

⁸⁷ Singpurwalla forthcoming, p. 9.

§13. Spirit as Essential to an Embodied Soul and Its Relation to Appearances

As we have seen, spirit experiences anger and rouses the soul to action when it perceives either a physical danger to oneself or those one consider one's own or a threat to one's honor and reputation. An embodied soul exists in a social world through which it must navigate and interact with other embodied souls, for individuals lack the skill and time necessary to provide for themselves all that they need to survive. This dependence on the mutual accommodation of needs serves as the social basis for the city. Regardless of constitution, though, all embodied souls face the same problem of the scarcity of appetitive goods available in the world and the competition for them. We see this reality reflected in the origins of the luxurious city when Socrates explains how the city must expand in size to satisfy all the desires of its citizens by warring with its neighbors for land (373bd). As Tad Brennan has claimed, the function of spirit is concerned with this very need to "negotiate the distribution of appetitive goods among multiple agents" and its sensitivity to honor is "for the most part simply a complex system for . . . distributions of goods within an exclusive group."⁸⁸ It is only when "multitudes of appetitive souls [are] in proximity to each other [and goods are scarce] that in turn creates a situation . . . of differential abilities to acquire and preserve those goods, plus possibilities for group sharing."⁸⁹ As a result, spirit has an external function of responding to "the existence of other appetites in other bodies."⁹⁰

⁸⁸ Brennan 2012, p. 107, 109.

⁸⁹ Brennan 2012, p. 110.

⁹⁰ Brennan 2012, p. 105.

We see evidence for Brennan's claim in *Republic II* when Socrates is confronted with the dilemma of how a guardian of the *kallipolis* can possess a nature that is both gentle and high-spirited at the same time. Guardians, specifically the auxiliaries, must possess these two qualities if they are to courageously confront the cities' internal and external enemies without behaving viciously towards its citizens (375c). The ties of solidarity and kinship enabled by "institutions of reputation, renown, [and] shame"⁹¹ are fundamental to spirit because it motivates the soul to act on behalf of the good of others; after all, the virtue of auxiliaries in the *kallipolis* is that of courage because they persevere through pains and pleasures to defend the principles set out by the guardians, which enable the good of the whole city.

Interestingly, Socrates finds the explanation to his dilemma by considering the nature of a pedigree dog, which, when it "sees someone it doesn't know, it gets angry before anything bad happens to it, but when it knows someone, it welcomes him, even if it has never received anything good from him" (376a). It's important to notice here that the dog's automatic reaction of friendliness to what is familiar and aggression towards what is unfamiliar is an unreflective response that's solely predicated on what it has been conditioned to recognize as familiar and unfamiliar. This is an essential civic value in the *kallipolis* because it enables every citizen to see every other person in the city as his or her fellow brother and sister; the extension of these feelings of kinship and fraternity to all citizens in the city creates a condition where, "whenever anything good or bad happens to a single one of its citizens, such a city above all others will say that the affected part is its own and will share in the pleasure

⁹¹ Brennan 2012, p. 110.

or pain as a whole” (462e).

However, this unreflective attitude of comfort and solidarity with what is familiar extends to values and beliefs as well. For example, in describing how an oligarchy transitions into a democracy, Socrates uses the analogy of a young man who experiences “civil war and counterrevolution within him[self]” as he struggles to maintain the familiar set of values “advocated by the person’s father . . . [and those whom he] was raised with and identifies with”⁹² in the face of a newer set of values advocated by “wild and dangerous creatures” (559e, 560a). These new values are characterized in terms of being alien and foreign as opposed to what is familiar, for “just as the city changed when one party received help from like-minded people outside . . . the young man changes when one part of his desires receives help from external desires” (559e). The sources of normativity that arise from social conditioning and reinforcement create pressure to conform with what is familiar by appealing to the spirit’s desire for honor.

Indeed, when Socrates claims that the start of our education “determines what follows,” he implicitly recognizes how our “feelings of allegiance to what we know and our feelings of identification and solidarity with whatever customs and values we have been raised with are very powerful determinants of human behavior,”⁹³ making our formative set of beliefs, attitudes, and values fixed, stable, and unchanging (465b). It’s important to note that the spirit’s unreflective fondness towards what is familiar is similar to what Kahneman calls cognitive ease, which relates to how System 1 engages in associative activation by easily recalling instances that are most

⁹² Brennan 2012, p. 116.

⁹³ Brennan 2012, p. 117.

familiar or memorable. Thus, there's a risk here for spirit to commit errors because of confirmation bias or the availability heuristic. This is illustrated in *Republic X* when Socrates claims that "we are well disposed to any proof that [poetry] is the best and truest thing . . . [because] the love of this sort of poetry has been implanted in us by the upbringing we have received under our fine constitutions" (607e). This fondness for a familiar custom explains why he, in expelling imitative poetry from the *kallipolis*, still experiences pain and behaves "like people who have fallen in love with someone but who force themselves to stay away from him, because they realize that their passion isn't beneficial" (607d). It's possible to imagine that someone without the sense of self-control possessed by the guardians wouldn't be able to stay away from consuming imitative poetry or would allow their familiarity and fondness for imitative poetry to sway their interpretation of evidence that it's harmful. It's clear then that certain features of spirit can be explained by its necessity to an embodied soul; its desire for honor and fondness for what is familiar comes from the fact that an embodied soul must engage with other souls in socialization as well as defend itself from internal and external threats. However, we also see how spirit can be considered non-rational and thus characterized in terms of System 1 functioning since it acts reflexively or automatically based on the appearances of what is familiar and unfamiliar without assessing the sources of its beliefs and values.

§14. Appetite as Essential to an Embodied Soul and Its Relation to Appearances

Just as the spirited part of the soul is essential to an embodied soul, so too is the appetite. The appetite is unique because it comprises the largest part of the soul

and is multi-form; its desires are concerned with “the so-called pleasures of the body . . . food, drink, sex, and all the things associated with them” (442a, 580e). Appetite’s desires for sensory pleasure, particularly those of food and drink, are essential to an embodied soul because the physical body requires nourishment to perform all the tasks necessary for survival. Thus, despite characterizing the appetite as also the money-loving part of the soul, Socrates recognizes that the appetite pursues money instrumentally “because [bodily] appetites are most easily satisfied by means of money” (580e). Furthermore, its sensitivity to physical sensations such as pains and pleasures serves an important function “as internal signaling systems for processing information about things that are really damaging or really restorative”⁹⁴ to the physical body; the appetite enables the embodied soul to safely navigate its environment, avoiding dangers that would threaten its physical integrity. Thus, appetite is essential because it orients the embodied soul towards satisfying the requirements that the physical body requires to survive; this explains why “instances of food, drink, and sex consistently appear good to [the appetite] . . . whose job it is to attain those things,”⁹⁵ However, this also means that the only way the appetite interacts with its external environment is by depending on the judgements of sense-perception; it’s no surprise then that non-philosophic souls are classified in *Republic* V as “lovers of sights and sounds [who] like beautiful sounds, colors, shapes, and everything fashioned out of them” (476b).

We also see a very similar characterization of the lovers of sights and sounds in *Republic* IX when Socrates introduces the democratic constitution by claiming that,

⁹⁴ Brennan 2012, p. 110.

⁹⁵ Singpurwalla forthcoming, p. 16.

since the city is “embroidered with every kind of character type . . . many would . . . as women and children do when they see something multicolored . . . judge it to be . . . the finest or most beautiful of the constitutions” (557c). However, it isn’t the case that what’s multicolored and varied is truly beautiful, for the form of the beautiful – as is true for all forms – is stable, uniform, and “itself one . . . but because [it] manifests [itself] everywhere in association with actions, bodies, and one another, [it] appears to be many” (476a). Since appetite depends on sense-perception and doesn’t apply calculation and measurement to appearances, it’s clear how it can be misled about the natures of things like justice because appetite is sensitive to feelings and experience.

For example, in *Republic* III, Socrates says that, in addition to depicting falsehoods about the gods acting viciously towards each other, imitative poets also “tell us that the most important matters concerning human beings is bad. . . that many unjust people are happy and many just ones wretched, that injustice is profitable if it escapes detection, and that justice is another’s good but one’s own loss” (392b). Since the imitations “appear fine or beautiful to the majority of people who know nothing” because the imitations appeal to the people’s feelings and experiences, those who unreflectively rely on sense-perception and accept appearances of values will inevitably reinforce “widespread but false judgements of value”⁹⁶ by resisting the efforts of those who actually possess wisdom concerning such subjects – such as the guardians – to rationally persuade them (602b). We see an instance of this in the Ship of State metaphor in *Republic* VI, which represents how people who claim to be

⁹⁶ Moss 2008, p. 56.

experts about virtues – such as imitative poets, rhetoricians, and sophists – try to gain political power in a constitution by gratifying the useless and unnecessary desires of the masses and thereby discrediting those who possess such wisdom – the true philosopher (488a – 489a). Thus, imitative poets – possibly in addition to sophists and rhetoricians – can put “a bad constitution in the soul . . . by making images that are far removed from the truth and by gratifying the irrational part, which cannot distinguish the large and the small” by appealing to feelings and experiences (605c). We can thus conclude that, just as certain physical objects appear good to the appetite because of its dependence on sense perception and sensitivity to physical sensations, so too do ideas, beliefs, values, and attitudes appear good to the appetite because they appeal to feelings and experiences.

The depictions of the soul in *Republic X* and in *Republic IV* are compatible with each other because reason belongs to the rational or superior part of the soul, which applies calculation and measurements to the appearances of physical objects and scrutinizes beliefs, desires, and values. Spirit and appetite both belong to the non-rational part of the soul, which is non-reflective, basing its judgements, beliefs, and desires on appearances and impressions generated by sense-perception. Although Socrates first uses optical illusions to demonstrate the deception of the appearances of physical or tangible objects, it’s clear how the application of calculation and measurement to appearances can extend to intangible objects like beliefs, values, and attitudes. Thus, what it means for the soul to be non-rational is “for it to accept unreflectively that things are just as they appear to be. . . [whereas rationality entails that the rational part of the soul] be able to transcend appearances by calculating how

things really are.”⁹⁷

Conclusion

My aim in this chapter was to raise the challenges posed by the problem of cognitive biases, heuristic biases, and other System 1 structures that contribute to flawed and fallacious reasoning and to consider whether Plato’s conception of rationality can address these challenges. System 1 can be characterized as intuition, whereas System 2 can be characterized as reflection. Although both systems are essential for us to process vast amounts of information about the world and make decisions, there are inherent flaws in both System 1 and System 2 that produce cognitive biases and fallacious reasoning. What Kahneman ultimately suggests about how one ought to mitigate these problems is to actively engage System 2 reasoning to reflect on the impressions and impulses generated by System 1. Furthermore, engaging System 2 requires moderation or self-control, since System 2’s reasoned judgement often necessitates rejecting the intuitive, natural, or easy answer to a problem that’s suggested by System 1.

I then connected this to Plato’s account of the soul by explaining how Plato divides the soul into rational and non-rational parts. Spirit and appetite belong to the non-rational parts of the soul that rely on the impressions generated by sense perception and thus accept the mere appearances of things without seeking to give an account of them or assess them through calculation and measurement. Thus, it seems that Plato is “aware that there are parts of us that are prone to make quick, intuitive judgements, and he has identified two of those parts: spirit and appetite.”⁹⁸ Thus, I

⁹⁷ Moss 2008, p. 40.

⁹⁸ Singpurwalla forthcoming, p. 16.

suggest that we should think of the division of the soul into non-rational and rational parts as mirroring System 1 and System 2 processing, specifically by thinking of System 1 as a type of sense-perception that characterizes the non-rational part of the soul. Furthermore, the similarity in characterizations between Plato's theory of the soul and Kahneman's explanation of dual process theory means that there's a strong possibility for cognitive biases and fallacious reasoning to be found in Plato's depiction of the embodied soul

This presents a challenge that I'll respond to in the following chapter. If even philosophers have embodied human souls that are potentially susceptible to the errors of System 1 processing, what assurances does Plato give us that philosophers are nevertheless ideally rational and thus most qualified to rule in the cities? Furthermore, how can Plato be confident that the *kallipolis* is truly the best constitution given that the producers – who form the majority of the city's population – seem to be most susceptible to exhibiting the System 1 thinking that's vulnerable to error, since they don't undergo the same education that the guardians do to train the rational part of their souls? In short, given reason's limitations in souls generally, what safeguards does Plato build into the education of his citizens to counteract the errors that humans are prone to exhibit in reasoning?

Chapter Three: Reasoning and the Producers

Introduction

The challenge that cognitive biases and various types of fallacious reasoning present to my interpretation of Plato's conception of rationality – reason's functioning in philosophic soul-types and souls generally as an ordering and subduing of non-rational desires – is that it isn't enough for reason just to function in a lower-level capacity of determining and organizing one's desires. Rather, if one wishes to pursue the objects of rational desires – truth for philosophic soul-types and moderation for non-philosophic souls – one must actively engage the rational part of one's soul. My aim in this third chapter is to develop in detail the dialectical method that the guardians use to engage in the study of Forms and suggest that the practice of philosophy requires that practitioners submit their unreflectively held beliefs, values, and attitudes to critical self-reflection. As previously established in chapter 1, philosophic soul-types are already naturally skeptical and self-critical and seek to give an account of the beliefs and values they've been brought up with; this chapter follows the same thought but extends the analysis to the practical judgements that the guardians are concerned with when they are ruling the *kallipolis*. I see the dialectical method as the instrument used by the guardians to actively engage the rational part of the soul to form practical judgements. Thus, I want to suggest that, although the guardians and philosophic soul-types aren't perfectly rational because the rational part of their soul is embodied, their practical judgements and reasoned moral decisions aren't particularly vulnerable to the cognitive biases and fallacies of judgement that arise when one unreflectively accepts the impulses and impressions

generated by System 1 or the non-rational part of the soul, because they actively engage reason through the practice of dialectic.

However, this leaves out the problem of the sub-rationality of the producers I raised in chapter 1. If the dialectical method is what guardians can use to avoid making irrational decisions and producers aren't capable of engaging in dialectic, then it seems that the decision-making of producers would suffer from the problem of cognitive biases and fallacious reasoning detailed in chapter 2, as the rational part of their soul would then just passively accept the impressions generated by the non-rational part of the soul. It is easy to be pessimistic about the possibilities for the producing class in overcoming this problem and not only acting rationally, but even acting moderately. One can't help but think that, by *Republic X*, Plato seems to have forgotten about the producers even though they're the largest class in the *kallipolis*. However, Plato has to have something in mind for their ethical education and the possibility for non-philosophic souls to pursue rational goods such as moderation without also possessing an erotic desire for truth if he's assuming that the *kallipolis* can function without an extensive regulatory apparatus dictating the behaviors of the producers. I will propose a hypothetical educational curriculum for the producers that would serve as the basis of their ethical education, as well as go on to develop a method of hypothesis that producers can use to engage the rational part of their souls in their average, everyday lives such that they can make reasoned, moral decisions.

§15. The Necessity of Sense-perception in Reasoned Judgements

Do the challenges posed by the existence of cognitive biases and the ubiquity of fallacious reasoning constitute a fatal flaw for Plato's conception of the just soul?

That is, will the true philosopher who has been born with a philosophic soul, raised properly according to the educational curriculum developed in the *Republic*, and has grasped the Form of the Good make errors in judgement due to cognitive biases clouding her use of reason? To fully answer this challenge, it's essential first to consider whether Plato's theory necessitates that the true philosopher be perfectly rational.

The first indication that the true philosopher may be less than perfectly rational comes in *Republic VIII*, when Socrates introduces the four other types of constitutions and their corresponding soul-types in addition to that of the *kallipolis* and the philosophic soul. Specifically, he describes these four different constitutions as successive stages of devolution from the *kallipolis*, as "everything that comes into being must decay. . . not even a constitution such as this will last for ever" (546a). However, why does Plato think that the decay of the just city is a necessary condition of its very existence? I believe that a possible answer can be found in Socrates' explanation of where the just city first begins to go awry. He tells the story through the perspective of the Muses:

the people you have educated to be leaders in your city, even though they are wise, still won't, through calculation together with sense perception, hit upon the fertility and barrenness of the human species, but it will escape them, and so they will at some time beget children when they ought not to do so. . . . For a human being. . . [a] whole geometrical number controls better and worst births. . . . And when your rulers, through ignorance of these births, join brides and grooms at the wrong time, the children will be neither good natured nor fortunate. (546bd)

The *kallipolis*' decay is closely tied with the guardian's ability to perform calculations with this number, calculations that somehow inform them of the proper time to "beget children." In the *kallipolis*, reproduction is strictly confined to the mating festivals

that occur throughout a year, so the proper time to beget children might refer to the assignment of calendar dates when these mating festivals might be held. My focus here is on how the guardian's familiarity and calculation with the geometrical number relates to Plato's broader political project and his theory of the ideally just soul.

One possible interpretation of the fall of the *kallipolis* is that the philosopher rulers will, at some point, become susceptible to their appetite's desire for sex and reproduce outside of the designated mating festivals. Under this interpretation, the appetitive part of the soul will at some point overcome reason, if only for a brief moment, but the injustice that it causes within the soul of the guardians will be responsible for the injustice that occurs in the city, as "the intermixing of iron with silver and bronze with gold that results will engender lack of likeness and unharmonious inequality, and these always breed war and hostility" (547a). Thus, despite the educational curriculum and eugenics program Socrates prescribes to raise the best possible guardians, even they will fail to attain a truly just soul where reason rules over appetite. Identifying the error of the guardians in the Muses' story as an issue of a moral failing rather than a failure of knowledge initially seems like a plausible reading of the passage.

However, I reject such an interpretation because it ignores the aspect of calculating the whole geometrical number that involves sense perception in addition to calculation and measurement. This treatment of numbers differs from the numbers the guardians encounter in their mathematical curriculum, which were said to "be grasped only in thought and can't be dealt with in any other way," meaning pure calculation and measurement that dealt with the numbers themselves instead of the

bodies that they refer to (526a). As I'll expand on later, much of the guardian's educational curriculum follows along a structure designed to develop reason so that it can apply calculation and measurement instead of relying on sense perception, so it seemed as though the guardians did away with relying on sense perception in forming practical judgements. However, the story that the Muses tell of the dissolution of the *kallipolis* forces us to reconsider that assumption, as the whole geometrical number – because it “controls better and worse births” – is attached to tangible human bodies (546c). Since calculation must be used together with sense-perception in determining the fertility and bareness of the human species, the whole geometrical number cannot be grasped through reason or thought alone. The embodied soul is maimed by its association with the body because it possesses the faculties of sense perception that interferes with reason's power to grasp the truth. The fall of the *kallipolis* suggests that the philosophic soul-types are ‘ideally’ rational or as rational as possible given that embodied reason still must rely on the impressions and impulses generated by sense-perception instead of purely relying on calculation and measurement, the latter of which would only be possible for souls pure, disembodied reason. Thus, it isn't possible, at least in the visible realm, for one to make practical judgements and reasoned choices that are entirely without the possibility of error. However, guardians are able to minimize the possibility of cognitive biases and fallacious reasoning by engaging the rational part of their soul through the use of the dialectical method.

§16. The Dialectical Method

I want to suggest that the problems that arise from the non-rational part of the soul's capacity to form unreflective beliefs based on appearances isn't nearly as

problematic for philosophic souls as it is for non-philosophic souls. The reason for this is that philosophic souls are eventually taught in *Republic* VII how to engage in dialectic, which diminishes their dependence on “[their] eyes and other senses, [and] with the help of truth . . . allows [them to] look at divine images in water and shadows of things that are” (532c, 537d). Where the philosophic soul once could only rely upon his sense perception to receive the appearances of entities, he now uses reason to uncover the Forms that cast their shadows as imitations and appearances; as a result, when his soul is focused “on something illuminated by truth and what is, it understands, knows, and apparently possesses understanding . . . of what gives truth to the things known . . . the form of the good” (508de). If dialectic is the process by which we apply rational calculation and measurement to appearances and thus uncover the sources of our unreflectively held beliefs, values, and desires, then how does it perform this function?

To answer this, we must first differentiate the practice of dialectic from mathematics, as they both relate closely to the philosophic soul’s journey to understanding and knowledge. The two disciplines share some similarities; for example, when mathematicians “use visible figures and make claims about them, their thought isn’t directed to them but to those other things that they are like” (510e). Just as the image of a bed instantiates the form of a bed, the image of an equilateral triangle and other similar renderings of mathematical entities merely instantiate perfect mathematical entities. For example, when the geometry student draws conclusions from performing calculations and measurements using an illustration of an equilateral triangle – which might be drawn with slightly crooked lines such that

there are not three exact 60-degree angles – his claims refer not to the image but to the exemplary equilateral triangle. The objects of mathematical inquiry share the characteristic of “unqualified being”⁹⁹ with the forms that are the object of dialectical inquiry; that is, the equiangular property of the exemplary equilateral triangle is true of all possible instantiations of an equilateral triangle. Mathematical inquiry thus develops within the philosopher’s soul a particular comportment towards a certain class of entities that provide the “lowest-level articulation of the world as it is objectively speaking.”¹⁰⁰ That is, by “reasoning about a realm of abstract, non-sensible things”¹⁰¹ and gaining knowledge of entities that are closer to the truth, the philosopher moves away from opinion that concerns the qualified, perspectival being of perceptible objects. Thus, one of the priorities of mathematical inquiry within the educational curriculum is that it primes the soul for the later practice of dialectic, which extends reason’s capacities for measurement and calculation to everyday perceptible objects and intangible entities like values instead of just mathematical entities. In doing so, the study of mathematics itself also opens up a world of objective value that is essential to ethical growth by clearing “away the one-sided preconceptions [that the soul] grew up with so that concepts are entirely determined by what they are concepts of.”¹⁰² Insofar as mathematical inquiry orients the soul towards the light of reason, mathematicians themselves still only have a partial grasp of truth. When they apply calculation and measurement to mathematical entities, they treat the axioms, postulates, theorems, and definitions that govern those entities as if

⁹⁹ Burnyeat 2000, p. 22.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Burnyeat 2000, p. 72.

they were self-evidently true. As such, mathematicians “don’t think it necessary to give any account of them”; rather, they proceed from “these first principles through the remaining steps, [arriving] in full agreement” (510cd). Though knowledge of numbers and mathematical entities enable the philosopher to come close to fully utilizing the power of knowledge to grasp the truth, mathematical inquiry is still a step removed from understanding because it doesn’t seek to give an account of the first principles and it relies on visible instantiations of perfect mathematical entities with which to perform calculation and measurement. When one tries to obtain knowledge by starting “with something unknown and put[ting] together the conclusion and the steps in between from what is unknown” as mathematicians do when they “make use of hypotheses that they leave untouched . . . [then one cannot] command a waking view of [what is]” (533bc). Developing an understanding of the being of each thing instead requires that the philosopher undertake the practice of dialectic, which is the only such “inquiry that travels this road, doing away with hypotheses and proceeding to the [unhypothetical first principle of everything], so as to be secure” (533d). The specific method by which dialectic leads philosophers to “grasp the good itself with understanding itself” is through argument (532b). However, in what way does dialectic “do away with” hypotheses; that is, what does it mean for dialectic to proceed to first principles instead of conclusions, and what are the specific mechanisms of the argumentative method that philosophers are meant to apply to things like values and beliefs?

Richard Robinson’s characterization of the dialectical method as having both

an upward and downward path¹⁰³ provides a useful way of looking at the mechanism by which dialectic proceeds; this characterization is illustrated more clearly when we consider the Allegory of the Cave. The upward path of dialectic, which consists “in identifying the relevant hypotheses from which either the answer to the original question is to be derived or the original hypothesis is to be derived,”¹⁰⁴ represents the philosopher’s ascent out of the visible realm into the intelligible realm. Thus, it might be more accurate to specify that, when philosophers “do away with” hypotheses, they’re doing away with the mathematician’s treatment of hypotheses; instead of regarding hypotheses as self-evidently true, philosophers give an account for and confirm the truth of their hypotheses. The steps the philosophers take in applying the dialectical method to any question is summarized as follows by Hugh Benson:

They look for a hypothesis from which an answer can be derived and show how that answer is derived . . . search for a higher hypothesis from which the original hypothesis can be derived and they will test its consequences for consistency and against contrary evidence. Philosophers will take care to examine the consequences of the hypothesis that follow directly from the nature of the forms involved and not from contingent or artificial features of the hypothesis. Moreover, philosophers will recognize that until they have followed this confirmation process all the way to the unhypothetical [first principle of everything], they cannot be said to know the answer to the original question.¹⁰⁵

If the upward path consists in continuously developing hypotheses until one reaches the unhypothetical first principle of everything from which answers to questions are derived, then what questions does dialectic provide answers for? We find that, as the philosopher ascends to the intelligible realm, he’s “compelled . . . to answer . . . what each of [the things he passes by] is” (515d). That is, philosophers are concerned with

¹⁰³ Robinson 1953, p. 136.

¹⁰⁴ Benson 2011, p. 200.

¹⁰⁵ Benson 2011, p. 202.

the question of the being of entities, and their ascent out of the cave proceeds by “ask[ing] and answer[ing] questions most knowledgeably,” the end result of which is being able to “give an account of the being of each thing” (534bd). As a prisoner chained to the wall, the philosopher is ignorant because he believes that “the truth is nothing other than” the shadows he sees moving on the wall; it isn’t until he’s freed from his bonds, climbs up the steps leading to the low wall, and sees how he’s been deceived by the puppet-masters – whose puppets cast shadows from being illuminated by a fire – that he’s compelled to even think about the being of the shadows he saw as a prisoner (515c). I liken the prisoners in the cave to the representations received the non-rational aspects of an embodied human soul, since the prisoners uncritically accept the impressions generated by sense-perception as true. Socrates compares the condition of embodied reason to that of the sea god Glaucus, “whose primary nature can’t easily be made out. . . [because] his whole body has been maimed by the waves and by the shells, seaweeds, and stones that have attached themselves” (611c). I interpret the “shells, seaweeds, and stones” that attach to Glaucus’ body as the unreflectively held beliefs, values, and biases that an embodied soul – the prisoner in the cave – accumulates by living in the visible realm and failing to engage the rational part of his soul. The notion of ‘attachment’ is particularly apt; given how intuition relies on a large background of information, ideas, and concepts with which it engages in associative activation, it’s easy to see how difficult it might be to detach oneself from any false or mistaken beliefs, values, and attitudes – such as stereotypes – that have become deeply rooted in one’s way of thinking. We see the pain or cognitive strain the prisoner experiences as he’s

adjusting to the light of reason, as he's blinded by the brightness of the sun and must slowly adjust his sight. At first, he can only see shadows on the ground, but gradually sees the reflections of men and other things, the things themselves and the stars in the sky, and finally the sun itself (515c – 516b). The Form of the Good and the all the other Forms are represented by the sun itself and the things themselves respectively, whereas the puppets back in the cave are the mere likeness of the “animals themselves and other originals in the [intelligible realm].”¹⁰⁶

To specify the philosopher's ascent to the cave in terms of the dialectical method of hypothesis we've laid out, we'll track how he moves from a shadow of justice to its puppet, then to its Form, and finally the Form of the Good. While the philosopher is in the cave trying to answer the question of what justice is, he starts by looking for a hypothesis that explains how the shadow of justice is cast on the wall in front of the prisoners; here, he appeals to the puppet of justice and the fire that illuminates it. However, when he steps out of the cave and finally sees ‘the things themselves’ illuminated by the light, he now hypothesizes that the puppet of justice is just a copy of the things he sees outside of the cave – the Forms – which in turn can only be seen because of the Form of the Good. His ascent from the cave also mirrors his movement along the Divided Line, so the culmination of the educational program is obtaining knowledge of the Form of the Good, which entails understanding how “it is the cause of all that is correct and beautiful in anything, that it produces both light and its source in the visible realm, and in the intelligible realm it controls and provides truth and understanding” (517c). However, the philosopher is secure in his

¹⁰⁶ Burnyeat 2000, p. 43.

knowledge of the Form of the Good as an unhypothetical first principle of everything only by distinguishing “in an account the Form of the Good from everything else. . . surviv[ing] all refutation . . . [and] striving to judge things in accordance with being” (534c). The downward path of the dialectic, which “would consist in [finding] proof from the hypothesis to the answer to the original question [and] testing the consequences of the hypothesis by which one preliminarily confirmed the original hypothesis to see whether they agree with one another,”¹⁰⁷ is concerned with giving an account of the Form of the Good as well as seeing what consequences follow. Simply seeing the sun itself isn’t sufficient to guarantee knowledge of the Form of the Good; instead, the philosopher must somehow test what he knows of the Form of the Good by successfully responding to all possible refutations against it. Since the dialectical method gets at the question of the being of entities, it’s possible that the refutations are concerned with testing whether the Form of the Good is truly the unhypothetical first principle of everything by considering the possibility that there might be some higher hypothesis from which the Form of the Good can be derived.

There are several instances in which the dialectical method can be seen at work in the use of the *elenchus* in some of Plato’s early-period dialogues, most noticeably in the *Euthyphro*. In it, Socrates tests the consistency of Euthyphro’s knowledge of what piety is by engaging him in an *elenchus* wherein Euthyphro must defend his definitions of piety against a series of refutations. For example, when Euthyphro defines piety as “what is dear to the gods,” Socrates shows him how – since the gods aren’t in full agreement as to what pleases or displeases them – the

¹⁰⁷ Benson 2011, p. 191.

consequence of Euthyphro's definition of piety is that it leads to a contradiction, for "the same things then are loved by the gods and hated by the gods, and would be both god-loved and god-hated" (7a, 8a). Euthyphro's failure to defend this specific definition of piety against Socrates' refutation leads him to continuously amend his hypotheses to avoid similarly incoherent consequences, though to no avail. Thus, engaging in dialectic leads one to modify, discard, or replace one's mistakenly held beliefs, values, and attitudes.

The philosopher's ascent from the visible to the intelligible realm then represents progress towards an objective understanding of true values, such that the contingently-acquired prejudices and convictions the philosopher once held – solely in virtue of their familiarity – are replaced by "new and improved philosophical convictions that are underwritten by a scientific understanding of the true values,"¹⁰⁸ towards which the philosopher will still have viscerally-felt attachments, but only to all the values that his reason endorses. Since the 'things themselves' outside of the cave represent all other Forms besides the Form of the Good, the puppets inside the cave are imitations of the Forms of values such as justice, moderation, and the good in addition to Forms of physical entities such as beds and carpenters. This point is made explicitly when Socrates describes how the philosopher, when he returns to the cave after having grasped the Form of the Good, must again adjust his sight to the darkness of the cave; because of his disorientation, he would appear "completely ridiculous if he's compelled . . . to contend about the shadows of justice or the statues of which they are the shadows and to dispute about the way these things are

¹⁰⁸ Brennan 2017, p. 132.

understood by people who have never seen justice itself” (517de).

By interpreting the Allegory of the Cave as a journey to uncover true, objective values, I liken the puppet-masters who control the puppets that cast the shadows on the wall to the imitative painters and poets that Socrates criticizes in Book X. Just as the imitators are wrongly thought to be experts in the area of human excellence or virtue, so too are the puppet-masters regarded by the prisoners as truthfully representing the values of justice, the beautiful, or the good, for those shadows and images are actually distortions and misrepresentations of true values. The prisoners in the cave, by unreflectively absorbing the beliefs, values, and attitudes shown to them by the puppet-masters, can then be characterized as the lovers of sights and sounds or the inferior many who mistakenly opine that the varied, multicolored, and contradictory is what is truly beautiful or fine. Furthermore, as the lovers of sights and sounds, the prisoners in the cave are also in a way the non-rational parts of any embodied human being’s soul. What it means then to outlaw imitative art and poetry from the city is for the philosopher to return to the cave and repair or replace these corrupted and mistaken beliefs, values, and attitudes. Even though the philosophers are happiest when they’re led by the desires of reason to contemplate the Form of the Good and all the other Forms without distractions, Socrates says that the philosophers mustn’t be allowed “to stay there and refuse to go down again to the prisoners in the cave and share their labors and honors, whether they are of less worth or of greater” (519de). Indeed, the philosopher, having been brought up as he has been in a constitution where philosophic souls are carefully nurtured and developed instead of one in which philosophic souls are merely

spontaneous thereby owes a debt for his upbringing which is repaid by serving in politics for the good and happiness of the entire city. We should note here again the importance of the virtue of moderation, for even the philosopher must practice moderation by restraining the desires of the rational part of the soul to contemplate the Forms. The downward path of the dialectical method thus represents the philosopher's return to the cave, in which he keeps "hold of what follows from [the Form of the Good], com[ing] down to a conclusion without making use of anything visible at all, but only of forms themselves" (511c). Now that the philosopher has "seen the truth about fine, just, and good things, he'll know each image for what it is and also that of which it is the image"; that is, the philosopher sees what consequences follow from the understanding that the Form of the Good is the unhypothetical first principle of everything by making inferences of the relations between the Form of the Good and all the other Forms, and then from the Forms to their various instantiations (520d). Thus, philosophers – now returning to the cave to rule as guardians – only make use of hypotheses that have both survived all refutations and are consistent with the Form of the Good when they're engaged in the political task of "creat[ing] and establish[ing] good structures, both institutional and psychological,"¹⁰⁹ that approximate the various Forms of justice, moderation, and the fine in the visible realm.

The concern that first started us on the road to specifying the dialectical method in some detail was how it enabled the philosopher to resolve the challenge posed by cognitive biases, which has the effect of producing flawed and mistaken

¹⁰⁹ Burnyeat 2000, p. 55.

beliefs, values, and attitudes. The dialectical method – indeed, being a philosopher at all – necessitates that one adopts an evaluative disposition towards one’s own beliefs, values, and attitudes and subject them to scrutiny by defending them against all possible refutations and testing their consistency with the Form of the Good. Through the dialectical method, the philosopher replaces or discards those beliefs, values, and attitudes that are inconsistent with the Form of the Good or are thoroughly refuted through argument, such as engaging with another philosopher in an *elenchus*.

Furthermore, in addition to being self-critical, the philosopher is also self-aware; he recognizes that there may be possibilities for biases to affect his judgement and tries to anticipate those possibilities as they might occur. For example, in *Republic X*, Socrates recognizes that there’s an inherent weakness within his soul that causes him to desire imitative poetry despite understanding the harmful effects that imitative poetry has on the soul; he says that the only remedy “to preserve ourselves from slipping back into that childish passion for poetry which the majority of people have . . . [is to] repeat the argument . . . like an incantation . . . chanting that such poetry is not to be taken seriously” (608a). The disposition of being open to dialectical challenges that evaluate the sources of his closely held beliefs, values, and desires is a result of both the philosopher’s possession of natural virtues as well as an education and upbringing that nurtures his reason’s innate desire for knowledge.

Thus, these qualities together with the philosopher’s use of the dialectical method reduces the possibility that cognitive biases seriously affect the decision making and the rendering of judgements by the guardians.

Non-philosophic souls, on the other hand, don’t seem to be open to dialectic

and argument in the same way that philosophic souls are. In the case of non-philosophic souls, we should expect that, “when faced with a dialectical challenge to traditional values, [his] spirit can cling tenaciously to the folk-ways that are familiar to it, but it cannot defend or justify them philosophically.”¹¹⁰ If challenged to provide justifications for clinging onto their unreflectively held beliefs and values, non-philosophic souls would likely appeal to familiarity – “it’s what our kind of people do, it’s traditional, this is how we were taught to do it – [which is] insensitive to the actual goodness or badness of the customs in question.”¹¹¹ It’s also possible that if such a person encounters a questioner such as a vicious philosopher or a rhetorician that “comes and along asks someone of this sort ‘What is the fine?’ . . . he answers what he has heard from the traditional lawgiver, the argument refutes him, and by refuting him often and in many places shakes him from his convictions” (538e). In this scenario, instead of seeking a higher hypothesis from which an answer would be derived as the philosopher would do, the prisoner would “no longer honor and obey those convictions and . . . [is unlikely] to adopt any other way of life than that which flatters him” (538e-539a). Indeed, we’re told that the non-philosophic souls back in the cave would try and resist the philosopher’s attempt to convince them to leave the cave because they would believe that he had “returned from his upward journey with his eyesight ruined . . . as for anyone who tried to free them and lead them upward, if they could somehow get their hands on him, they [would] kill him” (517a). Thus, the exposure of non-philosophic souls to the practice of dialectic, argument, and refutation should be minimized because they would either become vicious towards

¹¹⁰ Brennan 2012, p. 116.

¹¹¹ *Ibid.*

other citizens or discard the values and beliefs instilled within them by the guardians.

Despite this, Socrates is adamant “that the power to learn is present in everyone's soul and that the instrument with which each learns is like an eye that cannot be turned around from darkness to light without turning the whole body” (518d). However, the specifics of what an educational program for non-philosophic souls or the producer class would actually look like is noticeably absent from the political project of the *Republic*; when Socrates proposes the educational program in Book II, the abolition of nuclear families and private property in Book III, and later the eugenics breeding program in Book V, he is addressing the importance of these programs in the development of the guardians, not the producers. I take this silence to be problematic, for we concluded earlier that it’s because the philosopher uses the dialectical method that he avoids the most significant problems that cognitive biases pose to the rule of reason in his soul. What assurance does Plato give us that the producing class in the *kallipolis* will not be especially susceptible to fallacious reasoning?

§17. An Educational Curriculum for the Producers

The answer I think would have to be found in education, which seems to me to be the most important institution in the *kallipolis*. After all, it’s through education and upbringing that someone can become reasonable at all, and it’s only when the *kallipolis* gets a good start by preserving institutions of good education and upbringing that the city will “go on growing in a cycle. . . produc[ing] good natures, and useful natures, who are in turn well educated, grow up even better than their predecessors, both in their offspring and in other respects” (424a). That’s why it’s so

essential, on Plato's view, for the guardians to "cling to education and see that it isn't corrupted without their noticing it, guarding. . . carefully as they can against any innovation in music and poetry or in physical training that is counter to the established order," because music and poetry are the primary instruments with which one receives an ethical education (424b). In developing a hypothetical educational curriculum for the producers, it would make sense then for producers and guardians to read the same poetry and hear the same music. To be more specific, every citizen of the *kallipolis* would have to read about censored stories that would only depict gods and heroes acting virtuously; that way, they would be brought up believing that "no citizen has ever hated another and that it's impious to do so. . . [and imitating] what is appropriate for them, namely, people who are courageous, self-controlled, pious, and free" (379c, 395e). Furthermore, these stories would also have to depict the gods' physical appearances and dispositions as singular, stable, and unchanging instead of shape-shifting, varied, and contradictory because the "best things are least liable to alteration or change" (380e). In being brought up this way, the producers would be less likely to be attracted to the type of imitative poetry that attempts to appeal to their feelings and experiences or to the types of constitutions that are multicolored and varied, such as a democracy. Furthermore, it's often the case that "the opinions they absorb at that age are hard to erase and apt to become unalterable. . . [and since the current educational program would ensure that] the first stories they hear about virtue are the best ones for them," the producers would be less likely to modify their beliefs, values, and attitudes about virtues, the good, or the beautiful if confronted with the types of arguments made by sophists and rhetoricians

(378de).

As for music, the producers would have to listen to the Dorian and Phrygian modes. In an analogous manner to the way Socrates selected what types of poems and stories to tell, his criteria for choosing the type of music to be heard is whether it imitates the characters or dispositions of virtuous people. Concerning the first mode, Socrates believes that the Dorian mode “suitably imitate[s] the tone and rhythm of a courageous person who is active in battle. . . or who is failing and facing [some misfortune]. . . in all these circumstances, [he] is fighting off his fate steadily and with self-control” (399ab). Though the Dorian mode seems to suit the auxiliary rather well because of its depictions of courage, honor, and warfare, it would also benefit the producers by showing them how to respond to difficult circumstances and misfortune.

For example, if we relate this to the grieving man in Book X, then we can see how the Dorian mode is meant to teach the producers how to respond to misfortune with rational deliberation instead of giving into grief, dulling their natural sensitivity to feelings and experiences. In contrast with the Dorian mode, the Phrygian mode seems to imitate philosophers by depicting the tones of “someone submitting to the supplications of another who is teaching him and trying to get him to change his mind. . . is acting with moderation and self-control, not with arrogance but with understanding, and is content with the outcome” (399b). The Phrygian mode is more centrally concerned with the civic virtue of moderation because it depicts a disposition that’s amenable to rational persuasion. Instead of seeing the dialectical method like the *elenchus* as a competition or believing that being refuted is shameful, the producers would be more open to being persuaded by the guardians and endorsing

the beliefs, values, and attitudes that the guardians hold.

We see then that simple poetry and music are essential components of an educational program that suits all the classes in the *kallipolis* because they enable the citizens to receive a proper ethical education. It's through music and poetry that the citizens learn about civic virtues such as moderation, courage, and justice and develop simple, stable character dispositions that are resistant to external change (400e). Since "simplicity in music and poetry makes for moderation in the soul," the producer's education ought to enable them to practice moderation and exercise self-control over their non-rational desires (404e). Furthermore, there's a sense in which an education in music and poetry has practical benefits by enabling the producers to become more skillful craftsmen, for anyone educated in such a manner "will sense it acutely when something has been omitted from a thing and when it hasn't been finely crafted or finely made by nature" (401e). The openness to argument or rational persuasion that comes about from hearing the Phrygian mode is an important disposition for the producers whose primary occupation is to produce physical crafts, for the maker only "has right opinion about whether something he makes is fine or bad. . . through associating with and having to listen to the [user] who knows" (601e). For example, if the flute-maker has one opinion of how to craft a flute but he isn't open to being persuaded by the flute player or isn't willing to follow the player's instructions, then he'd produce inferior flutes and thus be deficient in his role. Thus, an education in simple music and poetry not only enables producers to learn about civic virtues and develop the type of dispositions that virtuous people possess, but also enables producers to become more skilled at their own crafts.

What then of physical training? What need would the producers have to train their bodies if their job isn't to defend against internal and external enemies? The reason for including physical training under the producer's educational program is that "a fit body doesn't by its own virtue make the soul good, but instead that the opposite is true—a good soul by its own virtue makes the body as good as possible" (403e). That is, physical health of the body is reflective of one's psychological health or the well-being of one internally-ordered soul. I won't dwell too much on the specific activities that a physical training regimen for the producers would entail, except to say that it's highly unlikely that producers would be training under a program that's similar to what the guardians must endure. It seems that the guardian's physical training is specially designed with a heavy emphasis around the activities and environments that the auxiliary would be working in; by the end of their training, the guardians would be "able to see and hear as keenly as possible and to endure frequent changes of water and food, as well as summer and winter weather on their campaigns, without faltering in health" (404ab). Since the producers are unlikely to find themselves in these types of situations, it wouldn't make much sense for them to train with the same intensity as the guardians. It's more likely though that the diets of the producers and guardians might be more closely aligned, especially with regard to the avoidance of sweet desserts found in Syracusan cuisine and Sicilian-style dishes as well as Attic pastries, for Socrates tells us that "if one's body is to be sound, one must keep away from all such things" (404cd).

Although he doesn't say much in the way of justifying this position, I think there's a potentially compelling connection here to be drawn from Plato's criticism of

pastry chefs in the *Gorgias* that might help in making sense of why the avoidance of certain types of food or appetitive pleasures is necessary for one to practice moderation. In the *Gorgias*, Plato compares the knack of pastry-baking to the craft of medicine, essentially arguing that pastry-chefs seem more persuasive than doctors to most people because pastry-chefs gratify their appetites, giving them pleasure in the form of sweet treats, deserts, and pastries, whereas medical treatment typically causes people to feel pain. As a result of the kind of lifestyle that these appetitive souls lead, Socrates claims in the *Republic* that they eventually become “full of gas and phlegm like a stagnant swamp” and seek out medical treatment for their various ailments (405d). However, to order one’s life in such a manner isn’t just to live an objectively poor life, but also to harm the affairs of one’s city, for every citizen in “a well-regulated city has his own work to do and. . . no one has the leisure to be ill and under treatment all his life” (406c). In fact, Socrates states that the proper response for a citizen of the *kallipolis* who suffers from an illness and is “prescribed a lengthy regimen. . . [would be to] reply that he had no leisure to be ill and that life is no use to him if he has to neglect his work and always be concerned with his illness” (406e). Thus, the diets of the producers would at the very least be designed around avoiding the types of food that would gratify useless and unnecessary appetitive desires – perhaps more substantive than water and barley, but simpler than dessert pastries – and their physical training regimen should be of some moderate intensity such that they be sufficiently healthy enough to continue working efficiently.

So far, the producer’s educational program has closely followed that of the guardian’s, but we’ve now reached the point in Plato’s educational program where

the guardians are supposed to undergo a 10-year long education in mathematics, and it's at this point where the two educational programs will see significant divergence. The reason for this is that the educational program we've developed thus far has its aim in producing a generically virtuous citizen of the *kallipolis*; that is, the civic and personal virtues found in music and poetry and the physical health developed from physical training are values and characteristics shared by all classes of citizens. However, mathematics is far different from either music and poetry, for the mathematical curriculum is specially designed towards priming the rational part of the guardian's soul for the contemplation of the Forms; even for those guardians such as the auxiliaries who aren't contemplating the Forms, the mathematical curriculum is still important because they learn how to draw up battle plans and formations, an essential skill for warfare and defense. Thus, since these two areas of the studies aren't fit for the duties and functions of the producers, it probably isn't the case that the producers would have to learn 10 years of mathematics or all the same subjects that the guardians would have to learn.

However, what kind of mathematics would the producers have to learn then? Well, we know that they would at the very least need to know arithmetic, for the "common thing that every craft. . . uses and that is among the first compulsory subjects for everyone. . . [is] distinguishing the one, the two, and the three. . . number and calculation" (522c). Another clue that we're given about the type of mathematics that producers would learn is when Socrates states that the guardians must take up calculation "not as laymen. . . nor like tradesmen and retailers, for the sake of buying and selling, but for the sake of war and for ease in turning the soul around, away from

becoming and towards truth and being” (525c). In fact, mathematics only has the effect of turning the rational part of the soul towards contemplating abstract objects and leading towards understanding “provided that one practices it for the sake of knowing rather than trading” (525d). Thus, we know that there must be a set of mathematical subjects that are concerned specifically with the affairs of money-making and trading that the producers would have to learn, if they’re to function well in their role as profit-makers and wage-earners. Unfortunately, Plato doesn’t articulate any specific categories of these subjects in the same manner as he divides the mathematical curriculum for the guardians into arithmetic, geometry, astronomy, harmonics, etc., so the most we can do here is to speculate about whether the ancient Greeks had analogous subjects for the accounting, finance, or economic classes that exist today. Of course, it isn’t just the case that practical skills are all there is to the mathematics curriculum for the producers, for mathematics isn’t instrumentally valuable just for the sake of developing reason or learning new skills; it also opens up a world of objective value that’s constitutive of ethical life. However, whereas the mathematical education of the guardians naturally led them to the dialectical method, which allows them to engage the rational part of their soul and apply calculation and measurement to appearances, where does the mathematical education of the producers lead them if they aren’t allowed to practice dialectic? How is it possible for producers to actively engage the rational part of their soul beyond just reasoning about better and worse desires to pursue?

There is, I think, a potential solution around this problem, and it is to have the producers engage in a method of hypothesis that’s like the dialectical method but isn’t

aimed at the same inquiry that dialectic aims at, which is the being of entities. Instead, the inquiry of this method of hypothesis would concern the various ethical dilemmas that producers would have to navigate in their daily lives. What I'm proposing is this: producers would make use of a method of hypothesis that's akin to the type that mathematicians use when trying to solve problems. The reason for this is to circumvent the issue of having producers inquire into the being of entities since they don't possess the natures or the proper training that qualifies one to contemplate the Forms.

This method of inquiry, which would look very similar to the downward path of the dialectical method, would circumvent the problem of producers potentially arriving at false or mistaken conclusions about the nature of justice or the fine because mathematicians take their hypotheses to be self-evidently true and don't attempt to give an account of them; in the same manner, the producer would take the guardian's belief, value, or attitude concerning the relevant ethical principle that would apply to his specific ethical dilemma to be self-evidently true and then proceed to find an answer to the original problem that's consistent with this ethical principle. This way, the producer wouldn't have to contemplate the Forms and derive some ethical principle from the Form of the Good, but he can still arrive at some objectively correct solution to his ethical problem through his own calculation instead of being micromanaged by the law. Furthermore, this reduces the possibility that producers would try and form their own opinions about what's just, beautiful, or good such that they develop a set of beliefs, values, and attitudes that's different from those developed by the guardians, which are supposed to be objectively correct. Thus, we

should say that for any possible ethical dilemma X, there exists some relevantly applicable judgement or ethical principle Y from which a possible answer can be derived. The method would thus proceed in this manner: given that Y is self-evidently true, keep making inferences that are consistent with Y until you reach a course of action that, if implemented, would resolve your problem.

To illustrate this example, imagine the following scenario: a producer has come down with a disease characterized by the symptoms of phlegm and gaseous bloating and isn't able to work very efficiently in his role as a craftsman who produces farming equipment. This is a rather serious problem, since the vegetable and fruit seeds need to be planted before the rain season approaches; as a result of this deficient producer, there might not be enough food in the next harvest to feed the entire city, which would cause people to starve. The producer would go about trying to resolve this problem using the method we've described above: first, by identifying some judgement or ethical principle that applies to this case. Fortunately, we've already found such a judgement earlier: "a good soul by its own virtue makes the body as good as possible" (403b). Taking this to be self-evidently true, the producer then tries to see what consequences follow from this judgement until he arrives at a course of action that's consistent with it. One implication that can be immediately drawn is that the health of one's internal constitution is reflected in one's physical health. It follows then that someone who is suffering from a disease or an ailment instead of just a wound or seasonal illness is deficient in his nature or his habits (405d). Furthermore, someone who is deficient in such a manner cannot seek a cure or medical treatment for his condition, since medical treatment is only reserved for

“men who were healthy. . . in their natures and habits. . . and living an orderly life before being wounded” (407c, 408a). As such, the person who is suffering from a disease that results from a deficient internal constitution can either attempt to cure the disease through his own efforts or slowly waste away from his illness, which “becomes worse and more complicated [due to his inaction because he’s] always hoping that someone will recommend some new medicine to cure them” (425e-426a).

However, how does the producer know that he’s actually suffering from a disease of this sort instead of just a seasonal illness? Well, it’s by visiting a physician and getting a diagnosis of his condition; so, picture for a moment the producer sitting in the examination room waiting to hear about the results. The physician, a sophisticated Asclepiad doctor, comes in and tells the producer that he’s never seen a seasonal illness characterized by the symptoms that the producer is exhibiting and that he’s had to come up with “strange new names. . . such as ‘flatulence’ and ‘catarrh’ to describe [his] disease” (405d). It should be apparent now that the symptoms that the physician has described so far arises from a licentious lifestyle that’s characteristic of someone who’s ruled by his appetite, allowing it to grow in size and pursue as it pleases whatever lawful, but useless and unnecessary desires. The producer, perhaps recognizing for the first time how he’s let his soul be ruled by appetite for so long, must then accept the “the truth, namely, that until [he] gives up drunkenness, overeating, lechery, and idleness, no medicine, cautery, or surgery, no charms, amulets, or anything else of that kind will do [him] any good” (426ab). The specific course of action he would take to abandon the harmful way of life he’s lived so far that’s consistent with the ethical principle he started with would then be to

imitate the actions of a moderate man “when he’s acting in a faultless and intelligent manner, but he’ll do so less, and with more reluctance, when the good man is upset by disease, sexual passion, drunkenness, or some other misfortune” (396d).

Eventually, by imitating the virtuous actions of the moderate citizens around him, being rapidly re-educated in music and poetry, and enrolling himself under a physical training regimen where he’s not allowed to gratify his appetitive desires by drinking or overeating, the producer would eventually be able to settle into new “habits of gesture, voice, and thought” (396e). This course of action would be consistent with the ethical principle the producer first started out with because he restores the physical condition of the body by ordering his internal constitution through the practice of moderation.

The preceding example is a rough and ready approximation of what an application of the method of hypothesis that a producer could safely use might look like when resolving a practical problem that a producer might face. It does of course rest on a number of assumptions about the capacity for the rational part of the producer’s soul for (1) identifying the relevant ethical principle or judgement, and (2) drawing logical inferences that derive from it. I also recognize that that one conceivable reaction that a producer might have to the physician’s diagnosis and recommendation to abandon the licentious and harmful lifestyle he’s lived so far is to simply abandon the method of hypothesis and live in denial, continuing to gratify his appetitive desires while wasting away from disease. That being said, the ethical landscape is vast, and the scenario I chose was only one among many possible scenarios a producer might encounter. What I hope to have done is to suggest that it’s

possible for producers to possess just souls and pursue the civic virtue of moderation even without having the capacity or desire to engage in philosophy or the contemplation of Forms. All they would require are the “correct beliefs about the best good for the soul and knowledge of how to attain this good,”¹¹² which are those beliefs, values, and attitudes developed and institutionalized by true philosophers who have taken the long road up and down the dialectical method. When the producers have been brought up with a proper ethical education and have formed an attachment for the beliefs and values of the guardians, they’re less likely to modify or discard them, and the method of hypothesis we’ve now developed allows for the producers to preserve those beliefs and values while using their reason to deliberate on how those judgements are applicable to their own experiences by helping them resolve any ethical problems they might encounter. That is, the producers have the capacity to apply rational calculation and measurement to the mere appearances of values such that they can avoid being deceived or misled from living a just, moderate life.

Conclusion

My aim in this chapter was to respond to the challenges raised in chapter 2. In short, given reason’s limitations – in philosophical as well as non-philosophical souls – what safeguards does Plato build into the education of his citizens to counteract the errors that humans are prone to exhibit in reasoning? In the first part, I suggested that perfect rationality, or the use of pure reason without any involvement of sense-perception isn’t something that’s possible in the visible realm given that souls are embodied and thus the guardians must use their sense-perception to form practical

¹¹² Jeon 2014, p. 202.

judgements on some issues, which inevitably leads to error. However, even the impossibility of purely rational decisions doesn't preclude the possibility that there are ways in which guardians can actively engage System 2 or the rational part of the soul to mitigate and perhaps avoid the types of errors of heuristic and cognitive biases raised in chapter 2. They do so through engaging the dialectical method, which involves submitting all of one's unreflectively held beliefs, values, and attitudes to examination; this involves posing hypotheses until one arrives at the Form of the Good, then seeing how knowledge of the Form of the Good – which necessitates surviving any and all possible refutations – informs one's beliefs and values.

However, how are the producers and other non-philosophic souls supposed to engage the rational part of the soul if they aren't allowed to participate in the dialectical method because they lack the right natures and proper training? Formulating an adequate solution to this problem requires addressing the fact that the *Republic* is noticeably lacking in specific details regarding how the producers – despite being the biggest class in the city – ought to be educated and brought up such that they are able to become moderate citizens who have internalized and accepted the beliefs, values, and attitudes developed by the guardians. I have developed a putative educational curriculum involving music and poetry, physical training, and some mathematics because I interpret these components of the educational program prescribed in the *Republic* to be crucial to the ethical education of any citizen in the city, though it's apparent that producers wouldn't participate as extensively in the same mathematics curriculum and physical training regimen as the guardians because such training would be irrelevant to the roles they perform as craftsmen and money-

makers. I then suggested that the producers could engage in an alternative method of hypothesis in resolving ethical problems they encounter in their everyday lives to make reasoned, moral choices that can potentially avoid biases and fallacious reasoning. This method of hypothesis would be similar in structure to the one used by the mathematicians in solving geometrical proofs, as the producers would take whatever ethical principles, beliefs, or values established by the guardians to be self-evidently true – thus avoiding the problem of producers coming to false conclusions about the natures of things such as justice or the fine – and consider what follows from those principles to arrive at a solution to their problems. Thus, philosophic and non-philosophic souls can engage the rational part of their souls through the application of the dialectical method or this new method of hypothesis.

Conclusion

Throughout this project, our two main concerns have been the differing accounts of rationality as represented by the true philosopher (or philosophic souls) and the producers (non-philosophic souls). In chapter 1, I introduced and developed an interpretation of two conceptions of rationality that are associated with reason's function. On the one hand, lower-level or ersatz rationality is represented by reason's rule in souls generally, which is concerned with ordering and subduing the unnecessary and useless desires of spirit and appetite such that every part of the soul pursues only the proper objects of its desires, which contribute to the well-being of the entire soul. The harmonious ordering of one's internal constitution in such a manner constitutes moderation or self-control. On the other hand, ideal rationality is represented by reason's functioning in philosophic souls; in addition to its role in enabling moderation, reason also directs the entire soul towards pursuing the objects of its own desires, which are wisdom, truth, and an understanding of the Forms. Reason only does so in philosophic souls not only because they are born with natural virtues that make them naturally temperate and thus unlikely to be distracted by the desires of their spirit and appetite, but also because philosophic souls are naturally curious; they possess an erotic desire for the truth and seek to learn about it in any way they can. This difference in reason's desire to know the truth also makes philosophic souls less susceptible to cognitive biases and the other instances of fallacious reasoning that arise from the use of heuristics because philosophic souls seek to question the sources of their unreflectively held beliefs, values, and attitudes and try to give an account of them that follows from an understanding of the Form of

the Good.

What then of the producers? I argued in chapter 1 that the producers cannot be ruled by their appetites or possess appetitive souls similar to that of the oligarchic soul-type because Plato assumes that the *kallipolis* can function without an extensive legal system that regulates and monitors the behaviors of the producers in their activities as money-makers; this means that the producers must be ruled by their reason and possess some lower-level form of rationality that orders their appetitive and spirited desires. Furthermore, I have argued that the primary good that the producers pursue is the virtue of moderation; even though moderation is a civic virtue that's spread throughout the city, I see moderation as being especially key for the producers because their role as money-makers exposes them to numerous temptations and risks for them to indulge their appetitive desires, meaning that they have to exercise a strong degree of self-control. However, since the rational part of non-philosophic souls does not seek to give an account of their unreflectively held beliefs, values, and attitudes, this makes producers vulnerable to the problem posed by cognitive biases because they aren't as self-critical, reflective, and self-aware as the guardians are about the potential sources of bias that might affect their judgement.

In chapter 2, I introduced the issue of cognitive biases by presenting Kahneman's account of a dual-process theory of judgement and the characteristics and structures of System 1 and System 2. Kahneman's account of how cognitive biases and other instances of fallacious reasoning are produced is due to the fact that System 1 relies on associative activation and the use of heuristics to process large amounts of information in order to provide System 2 with the impressions necessary

to make a judgement, form a belief, or take some action. Since associative activation notices ideas or beliefs that are most familiar or salient, System 1 is especially sensitive to being influenced by feelings and experience because it prefers to be in a state of cognitive ease. At the same time, System 2 is lazy and averse to exercising mental effort in monitoring the impressions and suggestions generated by System 1 because cognitive strain is an unpleasant, discomforting feeling, so it takes significantly more self-control to constantly maintain one's attention and concentrate on a task for an extended period of time than what most people are typically willing to exert. Thus, we see that it's important to actively engage one's System 2 to avoid errors and biases in reasoning, and doing so requires self-control, self-criticism, and reflection; these are the same types of natural virtues that philosophic souls possess, although Plato uses the concept of moderation as analogous to self-control. I then characterized Plato's account of the rational part of the soul applying calculation and measurement to appearances in terms of System 2 processing, whereas the non-rational part of the soul, because of its sensitivity to feelings and experience, dependence on sense-perception, and tendency to passively accept appearances, is similar to System 1 processing. All embodied souls are composed of both rational and non-rational parts, and by interpreting System 1 processing as a type of sense-perception that doesn't summon the rational part of the soul, we noted how the problems of cognitive biases and other instances of fallacious reasoning challenge Plato's account of the soul.

In chapter 3, I responded to the challenges posed by cognitive biases by first suggesting that no embodied souls – not even the souls of true philosophers – can

escape using their faculties of sense-perception when they're tasked with making some practical judgement. That is, it's impossible on Plato's account for an embodied soul to have pure or perfect reason, or to only apply calculation and measurement, so it's not the case that errors in judgement – such as cognitive biases and the use of heuristics – are necessarily fatal to Plato's conception of ideal rationality. Rather, as Kahneman suggests, we can mitigate the problems presented by the innate flaws and limitations of our cognitive capacities by actively engaging our System 2 or the rational part of our soul to be a vigilant monitor of System 1, or the non-rational part of the soul. In other words, being rational entails continuously engaging in the activity of reasoning. For Plato, the activity of reasoning is the practice of philosophy, or more specifically the practice of the dialectical method. To practice philosophy is to take our intuitions, our unreflectively held beliefs, values, and attitudes and critically examine them in the light of reason, in the light of a true understanding of the Form of the Good.

If we now apply these conclusions, I think there's a strong case to be made that the activity of reasoning must typically proceed as a social activity for Plato.; Anthony Laden develops just such an account in *Reasoning: A Social Picture*. On Plato's account, true understanding of an idea or hypothesis necessitates that it follows as a consequence from the Form the Good and that one has defended it from any and all possible refutations. Laden suggests that, if “reason's authority rests in its. . . openness to criticism. . . [and nobody] is all-knowing, then being open to criticism inevitably means being open to criticism from others.”¹¹³ Negotiating over

¹¹³ Laden 2012, p. 15.

the reasons offered by others or defending one's own reasons thus "involves an acknowledgement. . . [that] reasoning is social and ongoing. . . [and] that we share some. . . space of reasons. . . [that] makes it possible for either of us to speak for both of us."¹¹⁴ Laden's main claim that "reasoning is fundamentally something we do together. . . does not deny that [one] can reflect on. . . problems on [one's] own, but to insist that [such reflection]. . . has to make reference to and thus be answerable to whether. . . [one] can offer these reasons to others."¹¹⁵ This account of reasoning as a social activity is not alien to Plato; if we consider how Plato's corpus is almost entirely composed of dialogues wherein at least two interlocutors are engaged in *elenchus*, then it's entirely possible, and even likely that when a guardian is engaged in the activity of reasoning about the Forms, applying calculation and measurement to appearances, and trying to render practical judgements concerning the *kallipolis'* institutions, she is doing so in the midst of other guardians who can then point out the potential sources of errors, biases, and other types of fallacious reasoning in her reasons and arguments. Furthermore, the fact that the guardians in Plato's *kallipolis* must be held accountable for their practical judgements, since this is essential in enabling the civic virtue of moderation. Presumably, it is due to this norm of accountability that any citizen in the just city – such as a producer – can understand, consent to, and endorse the guardian's beliefs, values, and attitudes as his own.

What it means for producers to actively engage the rational part of the soul such that they can set some rational good as an object worth pursuing is by reasoning in a manner that is analogous to the reasoning of the guardians. Doing so necessitates

¹¹⁴ Laden 2012, p. 15.

¹¹⁵ Laden 2012, p. 16.

that the rational part of a producer's soul be turned towards the light of reason through education. Since Plato isn't clear on how the producers are meant to be educated, I developed an educational curriculum based on an interpretation which holds that all the citizens in the just city are knowledgeable about the beliefs, values, and attitudes held by the guardians and act in a manner that is consistent with the practical judgements of the guardians. It's clear that Plato thinks that this kind of ethical education and development of character comes about through music and poetry, and to some extent physical training and mathematics. I proposed that the producers would more-or-less listen to the same music and read the same poetry as the guardians, though their participation in physical training and mathematics would be more limited, and perhaps specialized towards the specific craft that each producer is naturally attuned to practice. After receiving this hypothetical educational curriculum, the producers can then actively engage their reason through a method of hypothesis that's used by mathematicians in their mathematical inquiry, which is a lower-level form of inquiry than the dialectical method, as the dialectical method treats hypotheses truly as hypotheses instead of as self-evident first principles. However, this limitation is necessary because producers and other non-philosophic souls cannot and should not seek to give an account of the natures of things like justice and the fine because they possess neither the right natures necessary for contemplating the Forms nor the proper training to engage in the dialectical method, which is a far more advanced method of hypothesis. Instead, the producers would take the beliefs, values, attitudes, and ethical judgements of the guardians to be self-evidently true and try and see what consequences follow from these first principles.

By doing so, producers can actively engage the rational part of the soul and apply calculation and measurement to appearances instead of merely relying upon the impressions and appearances generated by sense-perception, thus mitigating the potential sources of cognitive bias and other instances of fallacious reasoning produced by the non-rational part of the soul.

A significant portion of this project has been dedicated to arguing for a specific interpretation of Plato's conception of reason and the activity of reasoning in the *Republic*. The interpretative view of Plato I have put forward is consonant with the views of scholars such as Jessica Moss, Rachel Singpurwalla, George Klosko, Tad Brennan, and Hendrik Lorenz. In arguing for a broader view of Plato's conception of reason, I do so for the sake of extending Plato's insights about reason as a necessary condition for living a good life into a contemporary understanding of rationality. Few of us today live under the type of constitution that Plato envisioned for his *kallipolis*. Furthermore, the suggestion that the producers listen to and obey the dictates of the philosopher rulers without seeking to question the truth of the beliefs, values, and attitudes of the guardians seems deeply authoritarian and anti-intellectual to us today. In both our present day and our recent past, we've seen how unquestioning obedience to a authoritarian regime can lead to horrendous afflictions on life, liberty, and the human condition. In short, Plato's views on the conditions that seem to sustain a life of reason seem inapplicable to contemporary conditions.

However, I want to suggest that we can still preserve Plato's views on reason and reasoning in the absence of the political conditions and institutions of the *kallipolis*. Plato holds open the potential for anyone – regardless of whether we

possess the right natures or have yet to undergo decades of philosophical training – to mitigate some of the limitations of our cognitive capacities. Each of us possesses the possibility to order our beliefs, values, and desires, as well as understand, endorse, and pursue some rational good. Such an approach to living rationally seems vital for civic life and the possibility for us as individuals to live a good life. Consider how, throughout the dialogues that comprise Plato’s corpus, Socrates is depicted as engaging with interlocutors who aren’t ideally rational, who are even hostile to the entire practice of philosophy. Nevertheless, Socrates thought it was important to engage with such interlocutors because he thought that people’s reasons would be improved if they could see the errors, biases, and flaws in their judgements or the inconsistency between their beliefs and values. The lesson we can draw from this and apply to our day and age is to be open to a life of reason, which entails embarking on the activity of reasoning knowing that one might be refuted; that is, to develop a fallibilistic attitude to reasoning. Although we might not be born with the best natures, desire to dedicate our entire lives to the practice of philosophy, or even take pleasure in reasoning, we can nevertheless still be responsive to the virtue of reason and recognize the normative force it has over us by being open to being reasoned with or questioned by others, and to receive opposing or contradictory viewpoints with an earnest curiosity instead of hostility. Furthermore, by starting from a recognition of the innate limitations and flaws of our cognitive capacities, we can also avoid being overconfident in our own points of view. Doing so is tremendously difficult because it requires that we be moderate, self-critical, and reflective, but the possibility still

exists for each of us to take up a life of reason that's responsive to ethical norms and rational goods, a truly good life.

Works Cited

- Annas, Julia (1981). "An Introduction to Plato's *Republic*," Oxford University Press, 335-353.
- Benson, Hugh H. (2011). "Plato's Philosophical Method in the *Republic*: The Divided Line" in *Plato's Republic: A Critical Guide*, Cambridge University Press, 188-208.
- Berger, Jonah, Marc Meredith, & S. Christian Wheeler (2008). "Contextual Priming: Where People Vote Affects How They Vote," *Proceedings of the National Academy of Sciences of the United States of America*, 105 (26), 8846-8849.
- Brennan, Tad (2012). "The Nature of the Spirited Part of the Soul and Its Object" in *Plato and the Divided Self*, Cambridge University Press, 102-127.
- Brennan, Tad (2017). "The Psychological Import of the First Wave in Republic V" in *Rereading Ancient Philosophy: Old Chestnuts and Sacred Cows*, Cambridge University Press, 121-140.
- Burnyeat, Myles F. (2000). "Plato on Why Mathematics is Good for the Soul" in *Mathematics and Necessity*, Oxford University Press, 1-81.
- Evans, Jonathan St B. T. (1984). "Heuristic and analytic processes in reasoning," *British Journal of Psychology*, 75 (4), 451-468.
- Evans, Jonathan St B. T. & Keith E. Stanovich. (2013). "Dual-Process Theories of Higher Cognition: Advancing the Debate," *Perspectives on Psychological Science*, 8 (3), 223-241.

- Jeon, Haewon (2014). "The Interaction between the Just City and its Citizens in Plato's *Republic*: From the Producer's Point of View," *Journal of the History of Philosophy*, 52(2), 183-203.
- Kahneman, Daniel (2011). "*Thinking, Fast and Slow*," New York: Farrar, Straus and Giroux.
- Klosko, George (1988). "The Rule of Reason in Plato's Psychology," *History of Philosophy Quarterly*, 5 (4), 341-356.
- Laden, Anthony (2012). "*Reasoning: A Social Picture*," Oxford University Press, 1-49.
- Lane, Melissa (2007). "Virtue as the Love of Knowledge in Plato's Symposium and Republic" in *Maieusis: Essays in Ancient Philosophy in Honour of Myles Burnyeat*, edited by Dominic Scott, Oxford University Press, 44-67.
- Lorenz, Hendrik (2006). "The Analysis of the Soul in Plato's *Republic*" in *The Blackwell's Guide to Plato's Republic*, Blackwell, 146-162.
- Moss, Jessica (2008). "Appearances and Calculations: Plato's Division of the Soul," *Oxford Studies in Ancient Philosophy*, 34, 35-68.
- Nehamas, Alexander (1999). "*Virtues of Authenticity: Essays on Plato and Socrates*," Princeton University Press, 251-278.
- Plato. "*Republic*," edited by G. M. A. Grube and C. D. C. Reeve, Hackett Publishing Co.
- Robinson, Richard (1953). "*Plato's Earlier Dialectic*," Oxford University Press, 136.
- Siewert, Charles (2001). "Plato's Division of Reason and Appetite," *History of Philosophy Quarterly*, 18 (4), 329-352.

- Singpurwalla, Rachel (2010). "The Tripartite Theory of Motivation in Plato's *Republic*," *Philosophy Compass*, 5 (11), 880-892.
- Singpurwalla, Rachel (2011). "Soul Division and Mimesis in *Republic X*" in *Plato and the Poets*, edited by Pierre Destrée & Fritz-Gregor Herrmann, Leiden; Boston: Brill, 283-298.
- Singpurwalla, Rachel (2013). "Why Spirit is the Natural Ally of Reason: Spirit, Reason, and the Fine in Plato's *Republic*," *Oxford Studies in Ancient Philosophy*, 44, 41-65.
- Singpurwalla, Rachel (forthcoming). "Plato and Tripartition of Soul," in *History of Philosophy of Mind, Volume 1: Philosophy of Mind in Antiquity*, edited by John Sisko, Routledge Press, 1-19.