

Preferences, Personality, and Rational Choice in Aristotle and Theophrastus

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Abstract

Aristotle outlines a clear theory of human rational choice in his discussions of *prohairesis*, which is tantalizingly similar to, and even includes, central aspects of economic rationality. He deviates from modern theory, however, when it gets to one of the major components of modern economically rational choice theory, which are the preferences that guide individuals' decisions. Un beholden to disciplinary boundaries of the nineteenth and twentieth centuries, he mentions economic rationality only to delve into the variety of personality types and mental programming of the people he observed around him. Desires, emotions, and cultural values influence rational choice of different stereotypes in the *Virtues and Vices*. Likewise, his student Theophrastus also found the diversity of ancient Greek preferences to be more interesting than the decision-making process itself, particularly how the rational and irrational parts of the brain interact. Aristotle and Theophrastus describe economic rationality but their account of rational choice focuses more on the different personality types, and how emotions and irrational desires intensify, warp, or bypass altogether the rational calculating processes of the brain for some individuals.

Keywords: Aristotle, Theophrastus, Rational choice theory, Economic rationality, Personality

Resumen

En sus disquisiciones sobre la *prohairesis*, Aristóteles esboza una clara teoría sobre la elección racional humana que no sólo se asemeja, sino que además integra aspectos centrales de la racionalidad económica moderna. Sin embargo, su teoría se desvía de esta cuando llega a uno de los principales componentes de la teoría moderna de la elección económicamente racional, que son las preferencias que guían las decisiones de los individuos. Ajeno a los límites disciplinarios de los siglos XIX y XX, Aristóteles menciona la racionalidad económica sólo para ahondar en la variedad de los tipos de personalidad y de la programación mental de las personas. En *Sobre las virtudes y los vicios* los deseos, las emociones y los valores culturales influyen en la elección racional de los distintos estereotipos humanos. Asimismo, su alumno Teofrasto considera más interesante la diversidad de las preferencias y la manera en que interactúan las partes racional e irracional del cerebro que el proceso de la toma de decisiones en sí mismo. Aristóteles y Teofrasto describen la racionalidad económica, pero conceden mayor importancia a los diferentes tipos de personalidad y a la manera en que las emociones y los deseos irracionales intensifican, deforman o eluden por completo los procesos de cálculo racional del cerebro.

Palabras clave: Aristóteles, Teofrasto, Teoría de la elección racional, Racionalidad económica, Personalidad

1. *Introduction*¹

Few depictions of humanity appear as stifflingly rigid and schematic as the processes of human behavior outlined in modern rational choice theory. Especially when they are formalized as the constituent elements expressed in economic rationality. It seems to imprison the soul, confine the variegated beauty, creativity, pathos, and complexity of human wants, desires, and behaviors. We seem to be programmed automata, simple variations of computer code that drive robotic machines towards specifically identified and demoralizingly few purposes. Some scholars have accordingly critiqued rational choice theory and specifically economic rationality. *Homo oeconomicus* who maximizes profit and wealth all the time is too narrowly focused on money, too much of an oversimplification, specifically designed to reduce the analytical lens of human behavior, and therefore by definition not an accurate depiction of our complexity².

But Aristotle did not have to grapple with such schematic textbook paradigms. His thought swirls with the textured complexity of human experience. Unconstrained by modern disciplinary boundaries or the dogma of ‘economics’ as a discrete mode of thought, he had the freedom to discuss and analyze whatever he encountered. Nature, metaphysics, and human economic, intellectual, and social life. Imposing order on this boundless and formless chaos, he joined his fellow philosophers in creating the epistemological structure of Greek thought. So perhaps it is surprising to find that he and his fellow lovers of wisdom created rational choice theory that echoes modern economic rationality in startlingly unmistakable and substantive respects. *Prohairesis*, the process of carrying out choices by using the calculative, rational parts of the *psychē* to deliberate and act according to this logical decision-making, is central to Aristotle’s explanations of human behavior, his rational choice theory³.

Prohairesis is articulated with remarkably similar fundamental elements as rational choice theory in modern economics. These include precisely the same emphasis on deliberation as being exclusively about means rather than the ends of actions⁴, and the choice between a range of alternative options being based on one’s preset preferences. Though not identical, the ancient Greek and modern economic theories of rational choice bear enough resemblances that it is necessary to perform close analysis to determine the full extent of their differences and distinctiveness, since they were produced within different cultural, ecological, political, and technological contexts more than two millennia apart.

¹ Translations are my own unless indicated otherwise.

² For critiques of economic rationality, see the classic works by SIMON (1955, 1992), and SEN (1977, 1997). See full discussions by HARGREAVES-HEAP (1989), ERIKSSON (2005), and KIRCHGASSNER (2008).

³ Aristotle’s theory of *prohairesis* has received an enormous amount of attention in scholarship. See e.g. CHAMBERLAIN (1984) and LIU (2016).

⁴ See e.g. POLANYI (1957), 245-246; ERIKSSON (2005), 10-11; McCLOSKEY (1996), 143.

One area in which such a comparison becomes particularly insightful is when ancient Greek accounts of rational choice discuss personal preferences, which are a central consideration in modern economic theory. Textbook definitions of economic rationality include preferences as a matter of course:

According to [his] preferences, the individual assesses the various alternatives at his disposal, he weighs up the pros and cons, the costs and benefits of the alternatives against each other and finally chooses that (those) alternative(s) which come(s) closest to his preferences or which promise(s) to bring about the maximum net benefit (KIRCHGÄSSNER, 2008, 12).

[T]here is nothing in any kind of science which can decide the ultimate problem of preference. But, to be rational, we must know what it is we prefer. We must be aware of the objective implications of the alternatives of choice. For rationality in choice is nothing more and nothing less than choice with complete awareness of the alternatives rejected (ROBBINS 1932, 136).

These expression of preferences and economic rationality seem perfectly reasonable. Sensible and matter-of-fact. Some might object to the maximizing aspect, but generally this definition of rational choice, and the place of preferences within it, is largely unobjectionable.

But modern economic theory also sees preferences as being ranked in a specific hierarchy for modern individuals. These scales of preference appear as indispensable components of economic rationality. The most extremely formalistic expressions of this idea become more difficult to accept, for example when economists attempt to mathematically quantify or model human behavior, such as outlined in Game Theory:

Let us for the moment accept the picture of an individual whose system of preferences is all-embracing and complete, i.e. who, for any two objects or rather for any two imagined events, possesses a clear intuition of preference ... We expect the individual under consideration to possess a clear intuition whether he prefers the event A to the 50-50 combination of B or C, or conversely. It is clear that if he prefers A to B and also to C, then he will prefer it to the above combination as well; similarly, if he prefers B as well as C to A, then he will prefer the combination too. But if he should prefer A to, say B, but at the same time C to A, then any assertion about his preference of A against the combination contains fundamentally new information. Specifically: If he now prefers A to the 50-50 combination of B and C, this provides a plausible base for the numerical estimate that his preference of A over B is in excess of his preference of C over A (VON NEUMANN-MORGENSTERN 2004, 17-18).

As seen in this discussion, preferences are often argued to be transitive, meaning that the ranking of options is consistent and predictable. Rigidly ossifying of individual choice and preference, this aspect of modern economic theories was developed partly to enable the predictive modeling of individual behavior, in which a person's preferences in a given decision were consistent and always predictable. However, this approach seems incompatible with real life variations in choice, when

someone changes his/her mind, for example, or is flexible in certain situations⁵. From economic theory to philosophy, transitivity of preferences has engendered passionate debate, leaving many to question the value of rational choice altogether.

It would be strange indeed to find this aspect of rational choice theory in a thinker such as Aristotle or other Greek philosophers who predated and were unfettered by modern disciplinary demarcations. Within the discussions of *prohairesis*, however, it is possible to discern something analogous to preferences, specifically in Aristotle's (and other thinkers') focus on goods (*agatha*) and ends (*telē*). Ancient Greek philosophers had extensive debates about which preferences, goods or ends should be pursued, and ranked them in order of importance or desirability⁶. In ethical literature in particular, the link between preferences, ends, and rational choice are debated in depth, all with the ultimate goal of explaining how to achieve happiness. Buried in these discussions it becomes possible to discern that the Greeks did have a similar notion to modern rational choice theory's emphasis on transitivity of preferences, as seen in their theories of personality types and character stereotypes.

But here the Greeks provide much clearer insight than modern economic theory, with this rigid inflexibility being complemented by a sort of fluid malleability. Because the Greeks were not confined by the same disciplinary divides as modern scholars, they were able to combine emotions, irrationality, psychological and social factors within their overall theories that appear to anticipate modern notions of economic rationality supplemented by the observations of other disciplines as well. As Helmer argues, Plato's account of economic behavior is heavily shaped by his psychological theories⁷. Likewise, Aristotle and his student Theophrastus both combine a far broader range of variables than modern economic rationality in their theories of human behavior because they were interested in economic rationality in different and more complex terms. Therefore, ancient Greeks were observing the same phenomena as modern economic theorists describing rational choice, but they were also able to leap forward in their analyses to make systematic categories of different personality types based on their understanding of the interaction between the emotional (or

⁵ The number of choices and options made (as well as the influence of other people) are also important factors, however. If someone chooses their last meal, transitive preferences seem to apply more understandably than if one is choosing dinner or drinks on a month-long vacation. Game theory likewise incorporates a complicating factor, since decisions are not made within a vacuum, with perfect information and infinite time available to make a choice, but rather are heavily shaped by the actions and choices of the people around us, who might even restrict our possible options during the actual time of deliberation. Behavioral economics too incorporates the broader social context, with mob mentality and emotions as being significant influences on the decision-making process as well.

⁶ This is not to say Aristotle had a simple ranking of goods; this notion is complicated by his tediously elaborate critique of the Platonic Form of The Good in these discussions, for which he was exploring such fundamental issues as the priority and posteriority of qualities *kata physin* as well as other conceptual and categorical distinctions. See the in-depth discussion by SHIELDS (2018).

⁷ HELMER (2016).

irrational) and rational parts of the brain⁸, in which different combinations resulted in the major stereotypes of individual behavior.

In this paper I will argue that Aristotle and Theophrastus developed an elaborate series of character sketches to systematize the seemingly chaotic variety of personality types they saw around them; this categorization was based on the preferred goals or goods at which people aimed overall, the means they employed to achieving these ends, the values that guided their choices, and the different combination of psychological factors that determined whether rational deliberation or emotional impulsivity would be more decisive in their actions. While economic rationality features prominently in the descriptive aspects of their overviews, the Greek philosophers' main interest was in explaining how the full range of motivations alongside wealth, including honor, reputation, and pleasure, interacted to create the wide range of seemingly unique individuals, and to make prescriptive statements about how one should properly use wealth and other motivations in the life that is properly lived well.

2. Happiness and Preferences in Ancient Rational Choice Theory

Aristotle's *Eudemian Ethics* takes as a starting point the fact that happiness is commonly agreed to be the greatest and best of the goods *ὁμολογεῖται δὴ μέγιστον εἶναι καὶ ἄριστον τοῦτο τῶν ἀγαθῶν τῶν ἀνθρωπίνων* (*EEI* 7, 1217a 21-23). But it is not agreed what happiness is, which means that the greatest and best good, toward which all actions are directed, is itself a matter of dispute. Different people identify the highest good as different things, sometimes drastically divergent and diametrically opposed in every way. Therefore, not only the primary ends at which their actions aim, but also the means by which those ends could best be attained, would be diverse, perhaps incomprehensively so.

Aristotle goes on to discuss his own views (as did other philosophers), but amidst his prescriptive statements that express his attitudes, the descriptive details of the diversity of Greek opinions on happiness are also preserved. Moreover, though biased towards his own agenda, Aristotle's analytical structure is useful in conjunction with his descriptive summary of the variety of views current in his time to fill out a picture with impressive breadth, depth, and clarity. For example, while discussing the highest good contributing to happiness, he explicitly depicts different types of desired ends, using terms for choosing one thing in preference to another: *ἕτεροι δὲ τινες οὔτ' ἂν φρόνησιν οὐδεμίαν οὔτε τὰς σωματικὰς ἡδονὰς ἐλοιπτο μᾶλλον ἢ τὰς πράξεις τὰς ἀπ' ἀρετῆς*, "and some others would not choose any contemplation or bodily pleasure rather than actions coming from excellence" (*EEI* 5, 1216a 19-21)⁹. This unambiguous expression of preferences for one end over another is seen as being

⁸ In this paper I use the terms "brain" and "mind" to refer to the Greek term *psychē*, which is more usually translated as "soul," but which overlaps with modern notions of mental activity that we would typically categorize as cognitive, emotional, or psychological.

⁹ For excellence in Aristotle, *aretē*, see SZAF (2006).

characteristic of (and unique to) specific individuals who are seen as having stable, fixed desiderata relative to each other.

Aristotle's own ranking and that of other people is also described in the process of deliberately choosing some ends or goods in preference to alternatives: πάντα δὴ τὰ ἀγαθὰ ἢ ἔκτος ἢ ἐν ψυχῇ, καὶ τούτων αἰρετώτερα τὰ ἐν τῇ ψυχῇ [...] φρόνησις γὰρ καὶ ἀρετὴ καὶ ἡδονὴ ἐν ψυχῇ, ὧν ἢ ἕνια ἢ πάντα τέλος εἶναι δοκεῖ πᾶσιν, "all goods are outside or within the soul, and of these the goods within the soul are the more preferable [...] for contemplation, excellence, and pleasure are within the soul, of which some or all seem to be an end to all people" (*EE* II 1, 1218b 32-36). Some goods therefore are "more preferable" (αἰρετώτερα) both to Aristotle and to all other people; though they might not agree on which specifically, they nonetheless are seen to be best and chosen in relation to other goods, here those external to the soul.

Further detail about his views on preferences appear within the process of deliberate, rational choice, *prohairesis*: ἡ γὰρ προαίρεσις αἴρεσις μὲν ἐστίν, οὐχ ἀπλῶς δέ, ἀλλ' ἑτέρου πρὸ ἑτέρου· τοῦτο δὲ οὐχ οἷόν τε ἄνευ σκέψεως καὶ βουλήσ, "deliberate choice is choosing, but not choosing simply, but of one thing in preference to another; and this is not possible without consideration and deliberation" (*EE* II 10, 1226b 6-8)¹⁰. He elsewhere elaborates that, ἅπαντα τὸν δυνάμενον ζῆν κατὰ τὴν αὐτοῦ προαίρεσιν θέσθαι τινὰ σκοπὸν τοῦ καλῶς ζῆν, ἧτοι τιμὴν ἢ δόξαν ἢ πλοῦτον ἢ παιδείαν, πρὸς ὃν ἀποβλέπων ποιήσεται πάσας τὰς πράξεις, "that everyone able to live according to their deliberate choice ought to set object some for living well, either honor or reputation or wealth or education, looking towards which they will perform all their actions" (*EE* I 2, 1214b 7-10). Aristotle was not alone either in defining *prohairesis* as the deliberate choice of one option over another using rational thought (the same relationship between this verb and its object of its choice is echoed also by Xenophon in the *Memorabilia* IV 5, 11-12)¹¹. Therefore, rational choice involves the deliberate selection of one option in preference to another, and different individuals have their own unique preferences for what they believe contributes best to living well, and wealth is that end for only some.

Even within just the subheading of happiness, the variety of different ends and preferences that one could pursue can be illustrated by the contrast between *hoi polloi* on the one hand and philosophers on the other. Wealth (*chrēmata*) and greed (*pleonexia*, which may also simply mean the acquisition of ever more) are the goals of the way of life pursued by *hoi polloi* (*EE* I 5, 1216a 26-28). He elaborates in the *Nicomachean Ethics* that *hoi polloi* misidentify happiness as being pleasure, wealth, or honor (I 4, 1095a 21-25). Aristotle's disdain for such misguided priorities is palpable. His own definition of happiness as the highest good at which human action aims is much loftier: ἡ εὐδαιμονία ζωῆς τελείας ἐνέργεια κατ' ἀρετὴν τελείαν, "happiness is the activity of the perfect life in accordance with perfect excellence" (*EE*

¹⁰ Aristotle's most extensive discussion of *prohairesis* is at *EN* III 2-5, 1111b 4-1113b 6.

¹¹ See NIELSEN (2018), 206 and BJELDE (2021) for fuller discussions.

II 1, 1219a 37-38). There is a clear contrast between this ideal and the base, mundane activities of those who seek simply to maximize their gains and wealth.

The way of life practiced by those in the money-making arts and the *banausic* trades is not approved by Aristotle because it is entirely directed at the acquisition of necessities, which are means to the good life, not ends themselves (*EEI* 4, 1215a 27-1215b 1; *ENI* 5, 1096a 6-11). Moreover, unlike Croesus, for example, who equates happiness with wealth, Solon famously rejects and subverts this aristocratic or monarchic value judgment with one based on the collective values of the polis citizenry. Anaxagoras, who asked a similar question, likewise responds contrary to popular opinion: μή μέγαν ὄντα καὶ καλὸν ἢ πλούσιον ταύτης τυγχάνειν τῆς προσηγορίας, αὐτὸς δ' ἴσως ᾤετο τὸν ζῶντα ἀλύπως καὶ καθαρῶς πρὸς τὸ δίκαιον ἢ τινος θεωρίας κοινωνοῦντα θείας, “not being great and beautiful or rich, but living a life without pain and purely dedicated to justice or partaking in some contemplation of the divine” (*EEI* 4, 1215b 11-13). Greatness, beauty, and wealth are commonly considered to be the premier components of happiness that such a philosopher would refute as is the type of pleasure sought by Smindyrides of Sybaris or Sardanapallus (*EEI* 5, 1216a 16-19)¹². *Hoi sophoi*, therefore, did not subscribe to the view of the masses that beauty or wealth was enough to achieve happiness, and Aristotle believed that only the opinions of the wise should be considered since the masses speak with unfocused randomness (εἰκῆ) about happiness (*EEI* 3, 1215a 1-3)¹³. Aristotle preserves views of people who do see health and wealth as ends in and of themselves (*EEI* 7, 1217a 35-40), but to Aristotle they are only means to the higher end of happiness (*ENI* 7, 1097a 26-1097b 7), and therefore do not constitute the highest ends themselves¹⁴.

Furthermore, even within the ranks of the wise there were a range of ends and goods that engendered passionate and lengthy disputes. The Epicureans of course had elaborate calculations of balancing pain versus pleasure, with Democritus arguing not only that different people found different things pleasant, and therefore could not even agree on what constituted pleasure (DK 68B69, MCKIRAHAN 2010, 338, 16.62); he himself did not even believe pleasure was the highest good: τέλος δ' εἶναι τὴν εὐθυμίαν, οὐ τὴν αὐτὴν οὔσαν τῇ ἡδονῇ, ὡς ἔνιοι παρακούσαντες ἐξεδέξαντο, ἀλλὰ καθ' ἣν γαληνῶς καὶ εὐσταθῶς ἡ ψυχὴ διάγει, ὑπὸ μηδενὸς ταραττομένη φόβου ἢ δεισιδαιμονίας ἢ ἄλλου τινὸς πάθους. καλεῖ δ' αὐτὴν καὶ εὐεστῶ καὶ πολλοῖς ἄλλοις ὀνόμασι, “the goal of life is cheerfulness, which is not the same as pleasure [...] but the state in which the soul continues calmly and stably, disturbed by

¹² For the range of pleasures indulged by the Athenians and other Greeks, emotionally-fueled, out of control consumption which could lead to someone's financial ruin, see DAVIDSON (1998).

¹³ This is ironic since the overall association of the masses with wealth as a desirable end is enough to exclude their views from his larger theory of the best end in his account of *prohairesis*.

¹⁴ See also at the opening of *EE* (I 1, 1214a 1-9), where he also addresses earlier debates in religion and philosophy.

no fear or superstition or any emotion” (D.L. IX 45; DK 68A1)¹⁵. The end for Democritus was εὐθυμία, which was confused by some as ἡδονή, but rather was subtly distinct as more akin to *ataraxia*¹⁶. Others’ attitudes towards pain and pleasure might call for a more hedonistic lifestyle, justified by *physis* and *aretē* as by Antiphon and Callicles while others argued the opposite like Anonymous Iamblich (MCKIRAHAN 2010, 408-422). So even among those aiming at pleasure, each person may have had a distinct τέλος. Stoics might prefer virtue or some higher moral principle to pleasure¹⁷. Pseudo-Plato’s *Eryxias* is precisely the type of discourse on the highest good, where the relative merits of such goods as health, wealth, and virtue, are debated at length, and the belief that wealth brings happiness is qualified by the increased desires and difficulties that accompany (and sometimes more than offset) its benefits¹⁸. Such disagreements among philosophers indicate how subjective (and intractable) preferences could be even after extensive debate.

The almost infinite subjectivity of individual preferences was therefore a major problem for ancient philosophers trying to systematize and categorize human behavior within a single uniform and inclusive model of decision-making. Nevertheless, there were enough recurring patterns and shared characteristics that could help the wise in their attempts at simplifying the complexity of human thoughts and desires into a more manageable subset of common variables. Pleasure, honor, wealth, excellence, and justice, just to name a few, were universal enough as ends to be useful organizing criteria in sorting through this endless sea of preferences. Character traits and personality types emerged as extremely effective models to make sense of the wide range of preferences among the unique individuals in the ancient Greek world.

Plato’s *Republic* has a discussion in which people are classified into three types of individual: lovers of wealth, victory, and wisdom (581c). Each of these classes of person resulted from the different wiring of the *psychē* that distinguished different stereotypes from the other. Lovers of wealth were driven more by the ‘money-loving’ portion of the brain than lovers of victory or wisdom¹⁹. The theory of the mind that organized these different types of people provided a systematic explication of the reasons for such variation in personal preferences for different ends.

Aristotle likewise developed extensive theories to account for the diversity of human desires. *Virtues and Vices*, *The Eudemian* and *Nicomachean Ethics* include lengthy tracts exploring the variety of personality types, and goals they preferred, and

¹⁵ Translation by MCKIRAHAN (2010), 337.

¹⁶ For Epicurean pain vs pleasure calculations and the notions of pleasure as a moral end, see TSOUNA (2020), 145-164. See also KONSTAN (2006).

¹⁷ For the Stoics’ mastery of the self and one’s passions, see NUSSBAUM (1994), 316-401; for Stoic choice among desires, see WHITE (2010).

¹⁸ A recent, detailed exploration of this work has been carried out by DONATO (2022).

¹⁹ See LEESE (2021), 52-55 and HELMER (2016), 202-207 for the mental wiring of the *psychē* in Plato’s description of these money-loving individuals.

the mental processes that were unique to each. He contrasts opposing stereotypes on binary spectra, with extreme deficiencies on one end and superfluities on the other, for example the prodigal and the illiberal. The σώφρων individual, for example disdains pleasure, the liberal disdains excessive wealth (or wealth as an end in itself), whereas the μεγαλόψυχος, on the other hand, privileges honor above all else (*EE* III 5, 1232b 3-10). Disdain, καταφρόνησις, appears elsewhere in Aristotle's thought as well in discussions of preferences, virtues, vices, and personality types (e.g. *Rhet.* II 3, 1380a 20-21), and as will be discussed below seems to be a uniquely Greek idea to express the preference and selection of some desired behaviors and ends as opposed to others. Pleasure, wealth, honor, and reputation are all major ends that direct behavior and choice, and different combinations of each end up with a multitude of different personality types. The process of rational choice is likewise integrated into the explanation of each stereotype with these variables in mind. The μεγαλόψυχος (specific type of *prohairesis*), for example, purely involves calculations regarding money (*EE* III 6, 1233a 31-40), because the expenditure of money is the means to achieving the higher end (in the mind of this individual) of honor. The other personality types likewise have different end goals and different means of achieving those goals with effects on the type of rational deliberation they engage in.

Even the process of *prohairesis* is different because certain personalities are more likely to be affected by emotions in their decision-making process than others. Aristotle even extends this degree of emotional influence on rational deliberation to all personality types, since he sees the extremes as being universally characterized by emotional reactivity and devoid of *logismos* and *prohairesis*, whereas the mean, middle, moderate individuals do act according to rational deliberation (*EE* III 7, 1234a 24-28). For economic matters, the character type who observes the mean with respect to wealth is given the label of ἐλευθέριος, "liberal" (*EN* IV 1, 1119b 22-28). The difference between the liberal and illiberal person, for example, is how they view the expenditure of money, but some people are neither liberal nor illiberal, so not everyone uses *prohairesis* with respect to wealth in the same ways or in even similar extent (*EE* III 6, 1233b 15). Some like the μεγαλόψυχος employ a great deal of rational deliberation to the way they employ money, intentionally choosing "beautiful and unprofitable things rather than profitable and beneficial things" (*EN* IV 3, 1125a 11-13), while others are far more motivated by emotions, whose attitude towards wealth would therefore better be described as irrational. Emotions, logic, and mental programming therefore were used by Greeks to explain the difference between those who used rational deliberation in their pursuit and management of wealth and those who did not. They organized their analysis of the diversity they observed in the Greeks around them in their discussions of virtues and vices, character traits, and different personality types.

3. *Character Types and Economic Behavior Variations*

Aside from Aristotle, the most extensive treatment of attitudes towards wealth according to personality type is provided of course by Theophrastus in *Characters*. The man labeled as *Areskos* (from the noun ἀρέσκεια), obsequious, seems directed at acquiring reputation predominantly and his expenditure is almost exclusively characterized by flashiness, with the most ostentatious luxury items purchased for foreign friends and for himself (5, 8-5, 9)²⁰. His generosity, as Diggle puts it well, “is an excuse for self-advertisement”²¹. He therefore uses money as a means to the higher end of *doxa*. His behavior overlaps with that of three different personality types in Aristotle, the βάνουσος, χαῦνος (conceited), σαλάκων (pretentious), all of whom make tasteless and conspicuous displays of their wealth for the sake of popularity, bragging about their expenditures and using wealth for social purposes²². Aristotle contrasts the *areskos* with the *kolax* on a spectrum concerning *philia* and the pursuit of self-interest within that realm²³.

The person characterized by *Aponoia* (loss of all sense), on the other hand, is drastically different in not caring for reputation at all. Their behavior with money is almost the opposite of the *areskos*, in that they will seek gain from sources that will result in moral outcry and social opprobrium such as inn-keeping, brothel-keeping, and tax collecting (6, 5). He is τῶ ἥθει ἀγοραῖός (6, 2), with the adjective *agoraios*, meaning “common or vulgar in his habit”, perhaps with the sense of public speaking²⁴; but the term may also certainly have an element of marketplace-type transactional relations with other people, as certainly the description of the rest of their behavior implies. Theft, allowing one’s mother to starve, harassing theater-goers who have already paid for their ticket price all certainly could fall under this description. As could also the lending of money at exorbitant rates of interest and the forceful collection of that interest from small-time traders in the agora, behaviors associated with extreme profit-maximizing behavior that drew the social disdain of both philosophers and regular citizens alike²⁵. This person, therefore seeks wealth at the expense of reputation.

Similar but not identical is the Shameless person, characterized by *anaischuntia*, which is described as καταφρόνησις δόξης αἰσχροῦ ἔνεκα κέρδους, “[showing] disdain for reputation for the sake of shameful gain” (9, 1). This description encapsulates the same idea as *aponoiā*, explicitly expressing the preference for

²⁰ Although the text states that he purchases nothing for himself (5, 8), JEBB (1969), 68 points out that this is part of the characterization as a *banauos*; this statement is contradicted by the exotic eastern pheasants, Sicilian pigeons, Thurian oil flasks, Spartan walking sticks, and Persian tapestries he keeps for himself (5, 9). For full accounts of these items, see DIGGLE (2004), 238-244.

²¹ DIGGLE (2022), 95.

²² DIGGLE (2022), 90.

²³ See JEBB (1960), 63; DIGGLE (2004), 222-223. For Aristotle on *areskeia*, see *EE* II 3, 1221a 8; 27-28.

²⁴ JEBB (1960), 73; DIGGLE (2004), 252.

²⁵ See the discussion of this type of individual by MILLETT (1991), 179-185; LEESE (2021), 18.

shameless gain over reputation. The disdain for reputation, *καταφρόνησις*, echoes the descriptions of the *σώφρων* and liberal person by Aristotle above. Therefore, disdain is a Greek expression of choice of one preference over another. *Aidos*, shame, is a decisive factor here in determining whether someone would prefer reputation over gain that could be considered *aischros* as well as in a wide variety of other Greek authors including Aristotle and Pindar²⁶. Also unambiguously interested in shameless profit is the aptly-named *aischrokerdēs*, who is characterized by the desire (*epithymia*) for *κέρδους αίσχροῦ* (30, 1)²⁷. The ‘Shabby Profiteer’ shares many characteristics with the Shameless person, including the preference of wealth over reputation and honor; this person’s traits are almost entirely oriented towards economic matters, with such Aristotelian vices as deficient expenditures for the benefit of one’s social communities, and excessive grasping and taking.

Other characters are likewise economically focused, such as the person described by *mikrologia* (*μικρολογία*), penny-pinching. Among the most outrageous of this person’s practices is the charging of compound interest, *τόκον τόκου* (10, 11)²⁸. This well-known feature of modern finance existed in ancient Greece as well and was one of the more extreme (and sophisticated) methods of making money for the purpose of clearly self-interested maximization of profit. Such naked pursuit of self-interest, as well as excessive calculation, were decried by the wider citizen body and by philosophers such as Aristotle alike²⁹. That fact that this person is described as being *δεινός δὲ καὶ ὑπερημερίαν πράξει*, “clever at taking action on a time limit default” is revealing. On the one hand, *praxis* and *hyperēmeria* clauses are normal features of contracts at Athens by the fourth century, so what Theophrastus is describing here is simply the type of behavior that was regularly practiced in Athenian marketplace transactions³⁰. But the *δεινός* (clever) is illuminative, because it makes such behavior, the actionable seizure of property in case of a loan default, into an abnormal and unethical type of trickery. Cleverness here seems to be presented as a type of deception, simply in enforcing such contractually agreed obligations; it is an intrusion into a different set of ethical norms. What Theophrastus is doing, therefore, is using the moral values of collective reciprocity and cooperation among the citizen body against such impersonal individualistic behavior in the competitive market³¹. Therefore, the popular disdain of property seizure in the case of loan defaults is the

²⁶ See JEBB (1969), 97; DIGGLE (2004), 291-292.

²⁷ See HINSCH (2021), 205-206.

²⁸ For the popular moral outcry against such behavior, which is attested in Aristophanes’ *Clouds* and Antiphanes’ *The Chick*, see MILLETT (1991), 182-187. See JEBB (1969), 107-108, DIGGLE (2004), 309 and DIGGLE (2022), 126; LEESE (2021), 18-21 for further discussion of compound interest.

²⁹ See LEESE (2017) for Athenian popular outcry against such widespread and common profit-maximizing behavior in the marketplace, which resembled something like the moral economy of the peasants and the English Crowd (for which see THOMPSON, 1968). Aristotle’s views on excessive calculation as a vice can be seen at *VV1251b 24*.

³⁰ See references at DIGGLE (2022), 125-126.

³¹ For maximization behavior turned against one’s friends, see HINSCH (2021), 206 n. 125.

value system according to which Theophrastus (and his audience) judges this person's behavior³². Moneylenders are frequently the target of moral outcry and social disdain, and to engage in such extreme practices as compound interest was unambiguously an example of favoring profit and wealth over reputation. Yet again we see a character type preferring gain to *doxa* or *timē*, clearly fitting extreme textbook definitions of modern economic rationality.

And yet there are others who are excessively oriented towards gaining *timē*, such as the person characterized by *mikrophilotimía*, μικροφιλοτιμία. Such a personality is the opposite of many of the wealth-pursuing types and is specially developed by Theophrastus by adding an extra element of pettiness to *philotimía* with the prefix *mikro*³³. *Philotimía* of course, which is often ambivalent depending on the context, described extensively in philosophical and other fourth-century Athenian literature, to the point that Theophrastus himself even authored a work called *On Philotimía*.³⁴ But *mikrophilotimía* is defined as ὄρεξις τιμῆς ἀνελεύθερος, “a mean grasping at honor”, and it is the ἀνελεύθερος, which adds an element of ‘meanness’ to this person's behavior³⁵. The irrational emotional nature of this grasping can be seen in the term *orexis*, which is explicitly stated by Aristotle to be an emotional impulse rooted in the irrational portions of the *psychē* (*EE* II 7, 1223a 27-29). This person's grasping at honor is therefore not the product of deliberate rational decision-making, but rather is fueled by irrational impulses. Nevertheless, the use of money to attain honor, since this person spends excessive amounts (and therefore wrongly) on luxuries to accumulate *timē*, therefore fits definitions of economic rationality in the sense of simply applying the best means to achieving one's preferred ends.

This person's behavior includes discussion of wealth expenditure driven by *orexis aneleutheros*. The adjective here immediately elicits thoughts of a common character trait that is discussed widely in ancient literature, illiberality: ἀνελευθερία. This personality type and its features were discussed by Aristotle at length, but in a different sense, that of stinginess. Here Theophrastus' use of the adjectival form points to the subtle nuances operating in his mind about how to distinguish precisely between different character types. The use of *aneleutheros* to qualify the irrational longing or grasping implied by *orexis* shows how fine grained the particularities of the individuals they were discussing truly were. The fact that this person's pursuit of honor was seen as unreflective grasping, impelled by emotional reactivity rather than considered with rational deliberation, explains why the improper use of wealth for the

³² For specific references to such outcry, see JEBB (1969), 107-108.

³³ DIGGLE (2004), 405.

³⁴ See references at JEBB (1969), 178-179 (who discusses its full semantic range); DIGGLE (2004), 405-406 and DIGGLE (2022), 170.

³⁵ DIGGLE (2022), 171. As it appears in Plato, this term usually denotes a type of “mesquinerie et [...] bassesse” (pettiness and baseness), as argued by HELMER (2016), 201, who emphasizes the characteristics of this person as being associated by the Greeks with issues that arise from lack of free status and poverty.

pursuit of honor was decried by philosophers just as much as the sabotaging of honor or reputation for the sake of gain. Conspicuous consumption for the self-interested accumulation of *timē* and *doxa*, i.e. using the economic sphere for social purposes is at odds with Aristotle's higher prescriptive notions of happiness in much the same way as aiming at pure economic gain.

Theophrastus' own character sketch of the 'Illiberal' man (ἀνελεύθερος) is likewise focused on the improper use of wealth: ἡ δὲ ἀνελευθερία ἐστὶν ἀπουσία τις [ἀπὸ] φιλοτιμίας δαπάνην ἐχούσης, "illiberality is a certain absence of lavishness involving expenditure" (22)³⁶. Defined purely in economic terms, this person never spends enough on proper social and civic occasions, too focused on maximizing the wealth under their control to the detriment of their reputation. Aristotle also defined the illiberal person purely with respect to economic behaviors, since the ideal observance of the mean with respect to wealth is liberality. The illiberal is someone who is "more eager than is appropriate about wealth" (EN IV 1, 1119b 28-30). The term "eager" here, σπουδάζουσιν (*spoudazousin*), encapsulates the emotional desire for wealth rather than pursuit after deliberate reflection, which Aristotle above of course reserved only for the mean state of liberality. *Spoudazein* is a verb frequently applied to the immoderate yearning for wealth throughout Greek literature, which is often also associated with verbs of grasping, which of course are the root for the irrational emotional pleasure-seeking action of *orexis*³⁷. The direct link between the illiberal person and this emotional grasping at wealth without regard for its source is explicitly made by Aristotle in *Virtues and Vices*: ἀνελευθεριότης - ὀρέγονται τοῦ πανταχόθεν κέρδους (2, 7, 1250a 26-27). Here Aristotle includes also the brothel-keeping and small-time lending at usurious rates of interest that Theophrastus had included under *aponoia* and *mikrologia*, and sums up the full range of the types of wealth-grasping occupations this person might pursue with the term 'Shameless Profit-seeking,' αἰσχροκερδία, *aischrokerdeia* (EN IV 1, 1122a 1-3). This emotionally-fueled pursuit of wealth does include calculation and economic rationality in the sense of choosing means leading to the ends of greater gain. But because it is part of an extreme vice and lacks the proper sort of giving that characterizes the liberal man, it is worthy of blame (VV1, 1249a 26-30).

Just as it was difficult for one thinker to come up with the precise terminology to express the complex behavioral and cognitive phenomena they were observing in human behavior (sometimes using the same word to refer to different things), philosophers could not agree with each other on the definitions of character traits, either. For the Braggart (*Alazon*), Aristotle believed that the primary ends motivating their behavior could be either *doxa* or *kerdos*, whereas Theophrastus could only see self-glorification at the heart of this person's actions³⁸. So even the vast range of

³⁶ DIGGLE (2004), 419-420 and DIGGLE (2022), 176-177.

³⁷ See LEESE (2021), 191-192, 218-219.

³⁸ DIGGLE (2022), 182.

personalities and subjectivities regarding spending, saving, gain, honor, reputation, and pleasure in each thinker must be multiplied by the number of authors and opinions that could be held by each different observer. Such an infinite possible range of preferences, moreover would be even more manifold if people are allowed to change over time and static individual models are not assumed for each of these personalities.

The finely calculated balance between these behaviors and the role of economic expenditures within them point to extremely well defined and specifically demarcated, individually unique preferences. The significant overlap between personality types likewise demonstrates the subtle distinctions between different peoples' preference scales. As does the ambivalence of some philosophers alongside their elaborately detailed expressions of the precise nuances of the balance of wealth, honor, reputation, and pleasure that they believed to be proper for citizen behavior.

4. *Personality Diversity, Mental Programming, and Rational Choice*

Personalities allowed the Greek philosophers to organize the preferences of such divergent individuals in a systematic or at least coherent way. From an economic perspective, the means-to-ends relationship that is emphasized in rational choice theory appears in the ancient Greek philosophical texts as an expression of ways to achieve preferred ends. These ends varied by individual, but seem to be largely fixed based on personality type. While some disdained wealth, like the liberal person, others preferred profit to reputation like the shameless; some like the *μεγαλόψυχος* used wealth as a means to other ends, i.e. reputation and honor, while the shameless profiteer valued wealth as the highest end to be sought. Therefore, the ancient Greek personality sketches offer a similar measure of predictability as is seen in modern economic rational choice theory. Depending on one's brain wiring, emotional reactivity, use of reason to control passions and indulgence of desires, one could predict how a given character type would behave in a variety of situations. Ancient Greek philosophers were not constrained by disciplinary boundaries, and so could integrate social and psychological behavior in ways that were discouraged in economic theory at least in the times of hyper-focused disciplinarity. Because economic rationality was presented as subordinate to (a means to) the pursuit of the happiness within philosophers' disagreements over the highest Good, Aristotle and Theophrastus include it in their account of rational choice and character types, but then move onto explanations of why people aim at different ends more broadly.

Disdain, *καταφρόνησις*, is a specifically Greek expression of preference for one end or good over another. Wealth, honor and reputation (*doxa*) are other aims sought after, and the particular mixture and interplay between these variables was how the Greeks systematically categorized the myriad types of behavior they observed in the people around them. Different personality types operated according to slightly different interrelationships between these preferences. *Aidos*, desire, shame and other Greek conceptual notions are central variables that determine how someone will

behave according to their unique makeup. The *Eudemian Ethics* (1220b-1222b) and *Virtues and Vices* have detailed lists of character traits which all differ with respect to their use or deficiency of rational deliberation as opposed to emotional impulse, with vices being described as deficiencies in logical control and excessive activity of the irrational, pleasure-oriented centers of the brain.

Plato's description of the most extreme wealth maximizing person is also a particular character type with a specific psychological makeup. His 'Oligarchic Man' inherits a type of intergenerational trauma from his parents, and is triggered by the contrast with his family's former situation to become fixated upon the act of accumulating wealth endlessly (Pl. *R.* VII 553a-e)³⁹. Being stuck in such repetitive behavior is a psychological condition, which has social, economic, and political implications. The individual is behaving in ways that are targeting specific aspects of their current situation in life, and the consequences of this self-interested wealth accumulation reach beyond the bounds of that individual into the broader social context within that person lives. Other personality types for Plato also have different aims and goals.

Diversities in psychological wiring meant there was a spectrum along which Greeks fell, distinguished by the extent to which the rational parts of the *psychē* participated in the decision-making process that influenced behavior. To Aristotle, anger (*thymos*), desire, and *logos* interact in different ways: anger will respond to reason in ways that desire does not; therefore, it is less disgraceful to yield to anger than to desire because anger is somewhat governed by reason, so does involve some measure of rational choice (*EN* VII 6, 1149a 25-1149b 4). Different personality types are more susceptible to anger than to desire, so their particular mixture of these elements leads to unique responses in given situations; Aristotle feels greater compassion to those who commit disgraceful acts without deliberation because irrationally governed by anger, like the unrestrained man, than to the profligate, who commits shameful acts as a result of rational deliberation (*EN* VII 7, 1150a 25-31). Furthermore, among the unrestrained, there are those who use rational deliberation like the weak, who then cave to their passions after considering their actions, while those who act on impulse and do not stop to deliberate are the impetuous (*EN* VII 7, 1150b 19-28). For some then, the rational part of the *psychē* never fires at all, and so does not function as part of the decision-making process; emotion and desire are directly linked to action without reflection or deliberation.

Even when the rational part is firing, moreover, it does not mean that economic decisions are being made in the best way possible. The liberal man, for example, though exercising the rationality that is associated with his status as a character of the ideal mean, is prone to being wronged in economic deals because he does not place value on money (*EN* IV 1, 1121a 4-7). On the other hand, emotionally-fueled

³⁹ See HELMER (2016), 204-205 (and 209-213 on oligarchy more generally) and LEESE (2021), 31-36 for in-depth discussion.

addictive behaviors could run counter to rational deliberation (*EN* VII 7, 1150b 16-19), as can be seen in the “consuming passions” of drinking, lovesickness, and gluttony for luxurious food⁴⁰. In such character sketches, preferences seem fixed and will direct the behavior and choices of these individuals in predictable ways based on their unique combinations of rationality and emotional impulsivity.

It does seem, however, that some Greeks were reflective of which ends they ought to pursue. Philosophers’ debates about the highest good seem to be precisely the type of deliberation about ends that modern economic rationality tends to underemphasize. Aristotle opens the *Nicomachean Ethics* with exactly this sort of deliberation about ends, goods, and preferences; he elsewhere insists that *prohairesis* is not directed at ends, but rather the best means of attaining the ends one desires. In this respect he is somewhat contradictory. On the one hand, he certainly sees personality types as being almost hardwired or preprogrammed to pursue specific ends without reflection. On the other, however, he and other philosophers were indeed deliberating about the relative goodness of different ends. Here, however, his definition of those who fall within the mean, midway on the spectrum between the extreme binary personality types he outlines in such detail, may provide some insight. For the self-controlled, ἐγκρατής (*enkratēs*) individual, education and persuasion can affect one’s preferences, which can be changed through rational deliberation, whereas for the uncontrolled, ἀκρατής (*akratēs*) these preferences cannot be influenced in the same way (*EE* II 8, 1224a 32-1224b 2). He defines ἐγκράτεια as the exercise of rational calculation vis-à-vis pleasures and pains: ἐγκρατείας δ’ ἐστὶ τὸ δύνασθαι κατασχεῖν τῷ λογισμῷ τὴν ἐπιθυμίαν ὁρμῶσαν ἐπὶ φαύλας ἀπολαύσεις καὶ ἡδονάς, καὶ τὸ καρτερεῖν, καὶ τὸ ὑπομονητικὸν εἶναι τῆς κατὰ φύσιν ἐνδείας καὶ λύπης, “it is the mark of self-control to be able to hold down desire by means of reason when it rushes at petty enjoyments and pleasures, and to be strong, and able to endure the needs and pains that arise naturally” (*VV* 5, 1250b 13-16). Therefore, because (as discussed above) those who fall within the mean of personality traits are able to act in accordance with rational deliberation, while those who are characterized by the extremes behave in response to emotion, for the *enkratēs* the preferences one follows were not fixed but malleable. This may be why Aristotle only wanted to consider what the wise thought about happiness, not *hoi polloi*.

5. Conclusions

Economic rationality existed in ancient Greece and was described as such. As seen in Theophrastus’ and Aristotle’s own character sketches, some do indeed seem to be directed at little more than the pursuit of profit and *pleonexia*. If these people were asked what the highest good was, their answer would be wealth, as Aristotle complained. They were not interested in debating what the highest good was or what precisely constituted true happiness. Rather, they were acting somewhat as

⁴⁰ See DAVIDSON (1998).

preprogrammed automata, acting out of impulse or habit without introspection. This depiction of predictable behaviors resulting from specific personality characteristics does indeed resemble in significant respects the formalized economic belief in the ability to model human behavior when people have fixed preferences and are believed to be acting according to their own self-interest. This rough correspondence between ancient Greek personality theories and the most formalistic aspects of modern economic theories of rational choice is substantive and meaningful. It allows for insights into the cultural specificity of ancient Greek thought, the full range of ancient Greek individuals who may have behaved on ways that fit modern notions of economic rationality, and demonstrates the theoretical capabilities of ancient Greek philosophy. The tools at their disposal thanks to their conceptual interdisciplinarity were different from those of modern scholars, but the observations they were able to make turn out to be remarkably similar. But Aristotle and Theophrastus were more interested in the diversity than the uniformity of human behavior and thought. Preferences, emotional impulses, and irrational *orexis* interacted with rational calculation in unique ways; the very richness of these accounts, so fascinating in their detail and penetrating insight, makes it *appear* as if ancient Greek behavior diverged more from economic rationality than it did in reality.

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