

## **Plato and Science: Comments on Rachel Barney’s “What Kind of Theory is the Theory of the Tripartite Soul?”**

**Katja Maria Vogt, Columbia University**

### **Abstract**

Rachel Barney proposes that Plato’s theory of the tripartite soul is plausibly compared to scientific theories today. I depart from Barney by proposing that the tripartite soul is a model and that its status is hypothetical. And I raise four questions: (1) What follows from the Plato-science comparison, as Barney conceives of it? (2) Which questions emerge if science is looked at in the sophisticated mode that Barney employs in her discussion of Plato? (3) Current science invokes a multitude of subsystems relevant to motivation. Why compare it with tripartition? Stoic psychology may share more fundamental ideas with current science, including the premise that all goings-on in the soul are physiological movements. (4) If tripartition is a model, why would one expect it to account for all dimensions of epistemic activity?

### **Keywords**

Plato—tripartition—neuroscience—psychology—models—hypothetical method

## **I. Introduction**

How can it be that one and the same person desires to drink and desires not to drink?

More generally, how can an agent have motivations, and be affected by motivations, that pull in opposite directions? Plato’s theory of tripartition, formulated in Book IV of the *Republic*, offers a reply. The human soul has three parts: reason, spirit, and the appetites. Each part has its desires. Agents can be conflicted and in turmoil because their desires, though they are *their* desires, are also desires of these three parts.

Rachel Barney asks “what kind of theory is tripartition?” She and I share a starting point, namely that this question is intriguing. We also share a diagnosis. Plato is not offering a theory that is philosophical as opposed to scientific. He aims to analyze a range of phenomena in an empirically plausible way. As I would put it, Plato proposes a model for the best way to make sense of human motivation. In Barney’s words, he aims for a “full analysis of human nature,” where this includes “human thought, agency, experience and personality” and where it leaves “no remainder” (p. 4). The differences between Barney’s and my formulations are two-fold. First, a full analysis of human nature, I take it, cannot be attained via a single model. A full analysis of human nature would include not only getting clear about human motivation. It would offer, for example, an analysis of the human body and its place in nature; an account of the range of epistemic activities and states that figure in human life; and quite possibly more.<sup>1</sup> Tripartition is ambitious, indeed *very* ambitious, if it aims to get clear about human motivation. Aiming to do even more might seem grandiose rather than ambitious.<sup>2</sup>

Second, my formulation departs from Barney’s by speaking of a model. If we are interested in the comparison between Plato and science, we are well served by paying close attention to method. There is good reason to consider the tripartite soul a model.

---

<sup>1</sup> Plato’s *Timaeus* is written as a sequel to the *Republic*; it takes up questions that we may call biological and cosmological. *Republic* V-VII as well as any number of dialogues engage with questions about human epistemic activities and states. Additional questions may include our relation to divinity and what precisely it means to think of the soul as embodied.

<sup>2</sup> Indeed, if Plato aimed to do even more, this may push against the analytical reading that Barney defends, toward more metaphorical readings which assume that tripartition involves overstatements, etc.

And Plato is employing, explicitly, a so-called hypothetical method.<sup>3</sup> This is an intriguing parallel with science today. Scientists often refer to their proposals in these very terms, as offering models and as employing and putting forward hypotheses. Of course, these terms are not used in precisely the same way in Plato and in today's science. But they are used in sufficiently similar ways. Both in Plato and in empirical science, they signal that some of one's premises may not yet be fully explored or argued for. And they signal that one's model has limits. Models are formulated with a view to getting clear about some, not all, phenomena.

To repeat, these disagreements presuppose a fundamental agreement. Barney considers, in my view rightly, tripartition as intended to *do the work* that today scientific theories do: to get the phenomena—motivational conflict, and so on—right and to analyze them. This is a momentous proposal. The fact that I am on board with it makes me a co-conspirator, for surely the view that Plato has similar ambitions to scientists today must face quite a bit of resistance. My comments at the BACAP event were offered in this spirit, and so is this written version (altered a bit, though not to reflect fully the development of Barney's paper). If anything comes off the study of Plato, it should be a commitment to searching together. And if anything comes off appreciating the hypothetical method, it should be a

---

<sup>3</sup> Only the kind of theorizing that is concerned with Forms reaches unhypothetical insights. Book IV, which discusses the virtues and the psychology of the tripartite soul, is firmly on the level of hypothetical theory.

willingness to continue to investigate.<sup>4</sup> Along these lines, I offer an outline of Barney’s argument as well as four questions, which signal where, in my view, more work needs to be done.

## II. Barney’s Argument

Barney proceeds in three steps. First, she lays out the analytical reading of tripartition, so-called because of its widespread acceptance among scholars in the analytic tradition. This reading has two components:

- A. Each part of the soul—reason, spirit, desire (or appetites)—is a “functional, agent-like unity defined by a distinctive package of cognitive and conative capacities” (p. 4)
- B. There is nothing over and above reason, spirit, and desire that is plausibly called the self.

Second, Barney offers a sketch of what, on her view, our best relevant science—from here on, Science—says. This portion of Barney’s paper underwent much development and I shall not attempt to summarize it here. Initially, it offered a sketch of three motivational systems, located in the neocortex, the limbic system, and the reptilian

---

<sup>4</sup> In using this phrase “to continue to investigate” in conjunction with talk about a hypothetical method I aim to signal that, on my reading, tripartition is a model also in a further sense: it is a proposed analysis, not a doctrine. Given that it involves premises which may need further attention, it is plausibly part of a theoretical endeavor that is work in progress. For a more general defense of this approach to key components of Plato’s philosophy, cf. K. M. Vogt, *Belief and Truth: A Skeptic Reading of Plato* (New York: Oxford University Press, 2012).

system. Given their presumed tasks, these three systems seem to Barney to match up with Plato's three parts of the soul: reason, spirit, and desire.

Third, Barney turns to problems that the Plato-Science comparison faces. To her mind, these are not problems about what Science says; they are problems about what Plato says. The analytical reading, Barney thinks, might get some important nuances wrong. If so, the Plato-side of the comparison may have to be re-described, and hence the comparison may fail. Barney examines (1) a version of the so-called *homunculus*-worry; (2) the question of whether Plato refers to something like the 'self'; and (3) the question of whether tripartition maps on Plato's epistemology in the *Republic*. (1) and (3) may threaten the A-component of the analytical reading. (2) threatens the B-component. If either A or B is false, the Plato-Science comparison fails, or so Barney argues. My questions #1-3 below relate to (1) and (2), and question #4 relates to (3).

### **III. Plato and Science**

In past decades there was a presumption that, as much as Plato scholars may be interested in tripartition, philosophically it is a non-starter. Scholars tended to be apologetic about the notion of 'parts' of the soul, to name just one source of embarrassment. Recently it has appeared to some philosophers that they should be more confident on Plato's behalf.<sup>5</sup>

---

<sup>5</sup> For example, in "The Truth of Tripartition" Myles Burnyeat argues for just that: the truth of tripartition (*Proceedings of the Aristotelian Society* 106 (2006): 1-23). His focus, however, is different from Barney's. He defends Plato's proposal that there are three, not two parts; that is, that the soul divides up not only into reason and desire, but into reason, *spirit*, and desire.

The analytical reading is accepted and developed by many scholars, and Barney's defense of it is yet another step in its establishment. To repeat, this reading ascribes to each part of the soul a certain kind of separateness as well as a complexity that, crucially, involves both cognitive and desiderative activity. Suppose, then, that talk about three parts of this sort is taken literally and seriously, rather than interpreted as mere metaphor or as confused and bad philosophy. And suppose that the way in which Plato characterizes these three parts matches up with a distinction between three motivational systems posited by neuroscience. What follows? Would this be a fantastic coincidence, the achievement of super-human speculative intelligence? Does it validate Plato? Does it validate Science?

#### **IV. The Unity of Agents**

Barney has a lot to say about the analytical reading. She writes, as it were, from inside the forest of scholarship on ancient philosophy, though not as someone who is lost, but as someone who knows every tree. Her account of Science, on the contrary, is schematic: here we are presented with a forest, viewed from a distance with no individual trees in sight. This creates a methodological problem: one of the *comparanda* is under the magnifying glass, while the other can only be seen in outline. Consider an example of how this affects the project. With respect to Plato, Barney worries about the question of whether there is an "extra agent" involved when, for example, one monitors one's own psychological struggles—some kind of meta-agent hovering over the three parts of the soul. If this is the level at which tripartition is examined, corresponding questions in

Science need to be on the table. These would, I suspect, be questions about the unity of consciousness and its relationship to agency, questions that have proven extremely hard. Thus perhaps the thing to say is that Plato and Science interestingly run into analogous problems. Presumably, both need to explain how talk about parts or subsystems is compatible with the premise that agents—not some thoughts or desires of theirs—are the causes of their actions.<sup>6</sup>

Barney does not argue for the truth of Plato's proposals. But she seems sympathetic to the following claims: there are three subsystems of a certain kind in human psychology, and there is not, over and above these subsystems, such an entity as the self. My second question, then, asks whether this leaves room for a system of which the subsystems are parts—in other words, whether and how it accommodates unity. Barney speaks, for example, of “semi-autonomous” parts (p. 17), of parts that are “radically different” (p. 17), parts that are “robustly real and really distinct” (p. 4) and that each have “agent-like unity” (p. 4). She says less about the unity of an agent's psychology. Indeed, the idea that the agent is a unit seems to be a component of readings which she rejects: the non-analytic reading and/or the proposal that one needs to posit a ‘self’. And yet, the very notion of *subsystems* should warn against losing sight of the system as a whole.

## **V. Which Scientific Theory, Which Ancient Theory?**

---

<sup>6</sup> Cf. Ursula Coope on this question both in contemporary and ancient action theory (“Aristotle on Action” *Aristotelian Society Supplementary* 81 (2007): 109–138 (2007)).

The three-fold distinction Barney cites addresses an evolutionary carving up of the brain. We share our “reptilian system” (the brainstem) with lower species. Moving up the phylogeny, the next development is thought to be, roughly, the limbic system. It is not clear to me whether scientists actually believe there is such a thing as the limbic system, though they may use the term to identify a loose set of nuclei and parts of cortex that are involved in emotion.<sup>7</sup> Then the neocortex evolved, and with it higher cognitive functions like executive control and spatiotemporal reasoning. That is, the distinction Barney refers to may be evolutionary-anatomical. However, this does not help Barney, who asks “what kind of theory is tripartition?” Whatever the right answer is, tripartition surely is not an anatomical-evolutionary theory.

Barney admits, along the way, that much of current science posits more small-scale subsystems, and a much larger number of subsystems than three (p. 15). Arguably, this trend makes another ancient theory a plausible comparison: Stoic psychology. The Stoics analyze various doxastic, affective, and so on, activities as activities of *one* complex system. Perception, emotion, impulse for action, and so on—all of it is ‘rational’ in the sense that the movements of the human mind, which the Stoics take to be physiological movements, have conceptual-linguistic counterparts. This provides unity. And it also provides a starting point for studying specific phenomena.

---

<sup>7</sup> This component of my comments is now reflected in Barney’s paper.

In the past, I used the example of a Cautious Umbrella Carrier, someone who tends to not leave her apartment without her umbrella and who, at a given occasion, considers whether to take her umbrella or leave it at home. The goings-on in her mind involve perception (looking out of the window to see whether it is raining), information gathering (checking weather forecasts), probabilistic thinking (“how likely is it to rain?”), descriptive thoughts that are affectively colored (“I’m running late”), self-reproach (“how stupid of me...”), memory (say, of the many occasions where she lost her umbrella), long-term reasoning about how to get herself to modify her behavior, a decision (to take or leave the umbrella), etc.<sup>8</sup> It seems plausible that people who study the brain hypothesize ‘systems’ that help explain or describe these activities and their cognitive and affective dimensions. They are also likely to postulate some kind of unity: a unity that permits one to speak, in sum, of what goes on in motivation. Here is my third question for Barney. Depending on which scientific theories one refers to, different ancient proposals seem to be apt *comparanda*. In particular, a theory that is directly opposed to Platonic tripartition, namely Stoic psychology, may have significant advantages: it permits the postulation of however many subsystems seem helpful for analysis while preserving unity, and it starts from the idea—surely close to Science—that the movements of the mind are physiological. Why, then, should we turn to tripartition?

## VI. Hypothesis and Ongoing Investigation

---

<sup>8</sup> K. M. Vogt, “I Shall Do What I Did: Stoic Views on Action,” in Ricardo Salles, Pierre Destrée, Marco Zingano (eds.), *What is Up To Us? Studies on Agency and Responsibility in Ancient Philosophy* (Academia, 2014), 107-120.

Consider how Plato argues for tripartition. He employs two hypotheses. First, justice is the same in the soul and in the city (368c f.). Second, the Principle of Opposites. 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 (436b). With these hypotheses in place, Plato studies phenomena of motivational conflict, arriving at what the Simile of the Line might call a *paradeigma*, a model: the model of a tripartite soul. This model is itself a hypothesis: based on hypotheses, it cannot have more than hypothetical status.

In comparisons between modern science and ancient philosophy, there tends to be great focus on the (near) absence of empirical methods in antiquity. This observation neglects a major innovation in Plato, developed already in the *Meno* and the *Phaedo*: the hypothetical method. It also neglects that many of Plato's proposals are not put forward as 'theories', but as models which, like models today, pick out some *explananda*, set aside other issues, and help one analyze complex phenomena. These are steps towards the methods of science that we employ today. My fourth question for Barney, hence, is whether these are not rather impressive points of connection between Plato and Science, relevant for the question of what kind of theory tripartition is.

This line of thought affects Barney's concern (3), namely whether and how tripartition captures the epistemological distinctions of the *Republic's* middle books. For my reading, this question does not arise, or not in the way in which Barney conceives of it. There is no reason to assume that a model attempts to explain everything that needs explaining. Of

course, a compelling analysis of the *Republic* aims to read the dialogue as a whole. But this is compatible with assuming that tripartition addresses a specific range of phenomena. It aims to analyze human motivation. This includes many, not all, dimensions of human thought. Further questions, say, the distinction between knowledge, *doxa*, and ignorance, are for another day—for another sequence of inquiries that starts with some phenomena, sets up some premises, employs some models, and so on.

### **Bibliography**

- Burnyeat, Myles. 2006. The Truth of Tripartition. *Proceedings of the Aristotelian Society* 106: 1-23.
- Coope, Ursula. 2007. Aristotle on Action. *Aristotelian Society Supplementary* 81: 109–138.
- Vogt, Katja Maria. 2012. *Belief and Truth: A Skeptic Reading of Plato*. New York: Oxford University Press.
- 2014. I Shall Do What I Did: Stoic Views on Action. In *What is Up To Us? Studies on Agency and Responsibility in Ancient Philosophy*, eds. Ricardo Salles, Pierre Destrée, Marco Zingano, 107-120. Sankt Augustin: Academia Verlag.

### **Author information**

Katja Maria Vogt is Professor of Philosophy at Columbia University. She specializes in ancient philosophy, ethics, and normative epistemology. In her books and papers, she focuses on questions that figure both in ancient and in contemporary discussions: What

are values? What kind of values are knowledge and truth? What does it mean to want one's life to go well? Vogt is currently writing a book entitled *Desiring the Good: Ancient Proposals and Contemporary Theory* as well as co-authoring with Jens Haas a series of papers on *Ignorance and Action*.