

In Memoriam: Daniel C. Dennett

Synthetic Philosophy: A Restatement

The advanced division of cognitive labor generates a set of challenges and opportunities for professional philosophers. In this paper, I re-characterize the nature of synthetic philosophy in light of these challenges and opportunities. For my definition of synthetic philosophy see part 2.

In part 1, I remind you of the centrality of the division of labor to Plato's *Republic*, and why this is especially salient in his banishment of the poets from his *Kallipolis*.¹ I then focus on the significance of an easily overlooked albeit rather significant character, Damon, mentioned in that dialogue. I argue that if we take the relationship between Socrates and Damon seriously, we notice that in modeling imperfect polities, Plato inscribes Socrates *within* the advanced division of cognitive labor who defers to an expert on a key feature of the art of government.

In part 2, I'll re-introduce my conceptualization of synthetic philosophy and restate it. Back in 2019 I published a short paper on it that went viral and was immediately used by others.² Reflection on their use instructed me about an ambiguity in my position.

Building on the material in parts 1-2, in part 3, I'll contrast my account with a number of ways that Philip Kitcher has conceptualized synthetic philosophy in order to make more precise the version promoted here.

Part 1: Plato³

I treat Plato's *Republic* as offering two models to think about philosophy's relationship to the other sciences within the division of labor. One is the just normative ideal (exemplified by the *Kallipolis*) and the other, a more realistic one in a Nth best city—which is depicted through Socrates' interactions with his interlocutors in ancient Piraeus, the harbor of Athens. The two models are united by the same account of human nature and the significance of the division of labor. But in *Kallipolis* the division of labor and human nature are, at least in part, transformed. Unusual among commentators, I focus on the more realistic model in what follows. I do so because Socrates' interactions help diagnose a set of problems that are still with us. I argue that Socrates is shown to recognize salient expertise in a neighboring scientific practice that

¹ My references to Plato are by Stephanus pagination numbers as used at Perseus: <https://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0059.tlg030.perseus-grc1:1.327a> I have consulted Paul Shorey's and C. D. C. Reeve's translations and specified which one I rely on in context.

² Schliesser, Eric. "Synthetic philosophy." *Biology & Philosophy* 34.2 (2019): 1-9.

³ I thank Sophie Grace Chappell, Justin Vlasits, Eric Brown, and Stephen Menn for excellent comments on earlier drafts.

furnishes him with the tools in order to develop or at least begin to justify some of the details of *Kallipolis*.

I start by stating something uncontroversial: the division of labor plays a very important role in Plato's *Republic* (e.g., 455b-c).⁴ It is, for example, the cause of *all* political life (369c). The division of labor responds to human need but is itself the effect of human diversity (370b). In addition, this diversity is, at least, in part cognitive in character even in the relatively undifferentiated healthy (or true) city (371de), also known as the 'city of pigs' thanks to Glaucon's derision (372d).

The division of labor is also diagnosed as a source of problems in political life. We can discern this in one of Socrates' late arguments for censorship of the poets. Socrates' initial arguments for censorship of the poets in *Republic* Books II-III can be understood as being driven by Socrates' worries over the disorder or corruption the poets produce in their audience, young and old. This is why he targets their representation of the gods and punishment (e.g., 379-382), and goes on to criticize, say, their representation of extreme emotions and the flourishing of unjust people (388-392). And why he ends up confining poetry to a rather limited set of rhythms and topics (398ab).

In Book X, Socrates returns to his argument that poets corrupt (607c). In addition, as Griswold notes, in Book X, Socrates argues "that poets do not know what they are talking about."⁵ It is worth making specific what exactly Socrates is diagnosing. Among the many sites of ignorance, as we may call them, Socrates specifies, "the greatest and most beautiful things....warfare, generalship, city government [or city administration, *διοικήσεων πόλεων*], and a person's education." (599cd; using Reeve's translation). In many of his works Plato critically surveys the manner by which poets are treated as an authority on almost anything.⁶

I emphasize however, that for Socrates there is a skill, craftsmanship, or expertise in each of these greatest and most beautiful things. And so, one important charge (again we're dealing with "the greatest and most beautiful things") is that the poets misrepresent the nature of expert or skilled activity, and its contents. In fact, Socrates had explicitly said this just before that if somebody mentions, "that he has met a man who knows all the crafts and everything else that

⁴ Greco, Anna. "On the economy of specialization and division of labour in Plato's *Republic*." *Polis: The Journal for Ancient Greek and Roman Political Thought* 26.1 (2009): 52-72.

⁵ Griswold, Charles L., "Plato on Rhetoric and Poetry", *The Stanford Encyclopedia of Philosophy* (Spring 2024 Edition), Edward N. Zalta & Uri Nodelman (eds.), URL = <https://plato.stanford.edu/archives/spr2024/entries/plato-rhetoric/>. The quoted passage is from section, "3.3 Republic X."

⁶ I thank Sophie-Grace Chappell for pressing the point, and reminding me how commonplace didactic poetry was then.

men severally know, and that there is nothing that he does not know more exactly than anybody else,” we must assume “that he is a simple fellow.” (599cd, using Shorey.) That is to say, among the *reasons* why the poets are able to systematically misrepresent skilled and important activity of others is that the division of labor itself generates epistemic challenges to tracking the expertise of others. In many cases, when the skill itself draws on many embedded further skills, the character of such expertise is opaque to outsiders.

We can allow that nobody is so simple as to assume that anyone is an expert in everything. Rather, the real point is that we’re all vulnerable to being fooled by those who purport to speak authoritatively about some area of expertise; and we ourselves cannot be sure we’re in a good position to identify genuine expertise and keep it distinct from the *ersatz* kind.⁷

Now, within the advanced cognitive division of labor, Socrates’ criticism generalizes to *all* who, lacking the field-specific training, portray or discuss what we might call field-specific expertise.⁸ So, this does not just describe what now call ‘content producers’ in the arts and entertainment, but in our age also consultants, journalists, and the intelligentsia (not to mention internet gurus).⁹

So, according to Socrates the traditional poets of Greece sow at least three important confusions about the nature and content of expertise or (if you prefer) craftsmanship: they make it seem one person can be expert in a lot of things at once; they misrepresent the subject of expertise; and they (the poets) cannot teach it while creating the illusion that they do. Socrates goes on to claim that this ignorance sowing is in virtue of the fact that poets and their audience lack knowledge of-- and so are presumably inattentive to tracking -- a three-fold distinction between knowledge, lack of knowledge, and imitation. (598d)¹⁰

In what follows Socrates uses the fact that (i) Pythagoras inspired and was honored for an enduring way of life among his followers (600ab); and (ii) that Protagoras and Prodicus succeeded at convincing many leading citizens around Greece “that they will not be capable of governing their homes or the city unless they put them in charge of their education and make themselves so beloved for this wisdom that their companions all but carry them about on their shoulders.” (600cd, using Shorey.) In particular, Protagoras and Prodicus are presented as skilled in persuading many that they can teach some of the items on the list of the greatest and

⁷ I thank Eric Brown for providing me with this way of phrasing.

⁸ See also Millgram, Elijah. *The great endarkenment: Philosophy for an age of hyperspecialization*. Oxford University Press, 2015.

⁹ This is a reason why bullshit (in Frankfurt’s sense) about, say, campus life can proliferate so easily without check in the public sphere.

¹⁰ It is possible that someone (Aristotle, Leibniz, Whewell, Madame Curie, etc.) has genuine expertise in multiple fields; like the philosopher-kings of *Kallipolis*, they will need considerable training to get there.

most beautiful things (599cd) that poets muck up so badly that they need to be banned from the *Kallipolis*. Both (i) and (ii) are used to bolster the claim that Homer lacked expertise about the craft-involving things he portrayed.

The presence of (ii) may be thought surprising because Protagoras and Prodicus are sophists, and we usually associate Plato with a fierce critique of sophistry. It is especially surprising that success in the marketplace (for educating the ruling elite) is taken as a valid criterion for expertise in a particular field (educating the ruling elite in the art of government of homesteads and politics).

There may be some mockery in Socrates' description of the popularity of Protagoras and Prodicus.¹¹ And we may well wonder whether what is taught really is the art of good ruling, or whether they are popular in virtue of teaching how to stay in power or remain popular. (Just like modern consultants are popular, perhaps, because they tell management what it wants to hear.) I suspect Socrates is using the popularity of the Sophists among ruling elites as teachers of discrete skills on which the poets are to be assumed ignorant (including the art of government) as leverage for his own argument that the poets do not know what they are talking about when describing experts and their expertise.

But, and now I get to the nub of the matter, we should not ignore the fact that Socrates clearly thinks the art of ruling is a specialist skill; this is, after all, one of the key points of the ship of state passage—as piloting a ship is a real skill, so is the art of government (488de).¹² This is also the point of Plato's *Statesman*. In fact, the charge against the poets in *Republic* Book X is strictly analogous to the charge against the dangerous wealthy and demagogic political elites - - Machiavelli would call these the '*Grandi*' -- in the ship of state passage (489c). In both cases, the poets of Book X and the self-serving wealthy, democratic elites, end up creating confusion about what the real art of government is and who should be put in charge.

The art of government requires, on Socrates' view, in the best city that a caste is bred of men and women equally with highly specific cognitive characteristics in order to defend and rule *Kallipolis*. To be prepared as a skilled ruler (philosopher-king) one must pass through a very lengthy course in different kinds of mathematics, including arithmetic, plane and solid geometry, astronomy, and harmonics (522-531), and dialectics (532); give up property,

¹¹ Socrates' attitude toward Prodicus is a complex matter anyway. We can recognize without going so far as Corey, David. "Prodicus: Diplomat, sophist and teacher of Socrates." *History of Political Thought* 29.1 (2008): 1-26. See also Tosca Lynch cited in note 14 below.

¹² See also Sophocles, *Oedipus Tyrannus*, line 922-3 and 55-6. Mention Foucault?

undergo the marriage lottery, etc.¹³ This is familiar enough, although I say something of its significance below.

By now I hope I've succeeded to remind you that it is uncontroversial that one of the major sub-themes of the *Republic* is both the necessity of the division of cognitive labor and how it, in turn, generates some of the challenges in political life including how to secure its fruits in light of the ordinary social forces that undermine recognition of real skill, including the art of government.¹⁴ What follows is less commonly emphasized.

In the context of the education of the Guardians, a certain Damon is mentioned by Socrates. There are really two episodes. I discuss them to illustrate how Plato uses Socrates to show us something about the way philosophy engages with other sciences in the context of an imperfectly ordered polity.

The first episode begins around 400b1 and ends around 400c2. Damon is introduced as a technical expert on the representational qualities of different kind of rhythms used in musical poetry.¹⁵ If one does not like my use of 'representational' here, it's fine to substitute 'expressive' or 'emotive' as long as one remembers that the rhythms are supposed to correspond to particular human character qualities (that is, virtues and vices). In context, the issue is which rhythms represent and generate order and courage if and when they accompany words that are characteristic of order and courage.

During the first episode, Socrates appeals to the authority of Damon for two explicit reasons: first to save time (400c5); and, second, because Damon has specific expertise that has eluded Socrates (despite Socrates having a memory of hearing Damon expound on the relevant details (400b)).

In a note, Shorey suggests that there is a hint of satire in Socrates' remarks about the fact that Damon's own vocabulary or terminology (to illustrate the representational qualities of particular rhythms) was opaque. That may be so, but it does not follow that Socrates is thereby devaluing the claim to genuine expertise or skill he has attributed to Damon. (Consider:

¹³ How to think about the origin of the art of government in *Statesman* is by no means obvious. But the *content* of this skill involves, at least in part, the recognition and guidance of the field-specific expertise of others. I thank Justin Vlasits for discussion.

¹⁴ The necessity involved is really at least two-fold: it's required to meet our basic needs as well as for the attainment of justice. I thank Sophie-Grace Chappell for pressing this.

¹⁵ For excellent background and discussion on Damon and his musical expertise, see Tosca Lynch, "A Sophist 'in disguise': a reconstruction of Damon of Oa and his role in Plato's dialogues," *Études platoniciennes* 10. Lynch emphasizes the warmth with which Plato often describes Prodicus and his pupil Damon. <http://journals.openedition.org/etudesplatoniciennes/378>

presenting probabilities in terms of modalities with boxes and diamonds. One may mock them without denying the expertise involved.)

However, a bit later in the *Republic*, Socrates makes non-trivial show of the fact that at the founding of *Kallipolis* the purified (civic) religion, including (quoting Reeve's translation) "the temples and sacrifices, and other forms of service to the gods, daimons, and heroes; the burial of the dead, and the services that ensure the favor of those who have gone to the other world," (427ab) will be shaped by the binding advice of the Delphic oracle. Here Socrates clearly demarcates his own expertise in developing many of the rules and institutions of *Kallipolis* from those that are best left to divine inspiration. Given how important religion is in the home and daily civic life of an ancient Greek this signals on Socrates' part a major division of labor of the expertise required for the principles of political life. Voltaire treats Socrates as a victim of religious persecution.¹⁶ One can see, in part, why this is tempting. Socrates himself invites the thought that the philosophical expertise involved with regard to the political art is, in a certain (perhaps anachronistic) sense, secular in character despite also simultaneously pertaining to the highest religious things as symbolized by the complex roles the sun/Helios, also a god, plays as the source of Good.

I mention this because already in the first episode involving Damon, Socrates signals that the blueprint he offers will presuppose relatively important expertise that Socrates lacks and has to borrow on the authority of Damon. Of course, the selection of this skill is done in light of Socrates' normative priorities on the needs of the citizens to be educated in *Kallipolis*.¹⁷ This matters because it shows that in imperfect conditions, the Socratic legislative art is not self-sufficient, but part of a wider cognitive division of labor that has already advanced quite a way in Athens.

However, Socrates has the skill to authorize (post facto) that Damon's expertise is sound. How this is done is left off-stage. I treat Socrates' skill at dialectics as a form of expertise, including the kind of expertise by which one can check the expertise of distinct sub-fields without being able to generate the contents or skills involved.¹⁸

That is, the conditions to found a *Kallipolis* are, in part, dependent on the background expertise that is or is not ready at hand in all contexts. So, even in the first episode with Damon we are already instructed that the advancement of knowledge about the conditions of political stability

¹⁶ See Voltaire's essay on Newton in Voltaire's *Philosophical Letters* (1734).

¹⁷ Lynch, op. cit., is eager to emphasize this.

¹⁸ I thank Eric Brown for suggesting this. For details on Socrates' expertise, including the difficulty of characterizing what it constitutes, see Eric Brown "Socratic Methods" chapter 3 in *The Bloomsbury Handbook to Socrates* edited by Jones, Russell E., Ravi Sharma, and Nicholas D. Smith, eds. Bloomsbury Publishing, 2023.

within, say, musical theory is a non-trivial enabling constraint on or to the best or near best political life.

Before I move to the second episode, note two things: first, well into the early modern period, musicology was thought of as a mathematical science. It's possible this is itself an effect of (the Pythagoreanism of) Plato, and that Damon's musicology was not quantitative in character.¹⁹ In fact, at different times throughout the history of music and philosophy, musicologists and philosophers have been interested in versions of the question on which Damon is a purported expert.²⁰

Second, while I do not wish to exaggerate it, it's not as if Damon's acknowledged expertise is relatively trivial to the survival of *Kallipolis* or altogether insignificant. At various points in Plato's works music and philosophy are treated as rather close in character; one doesn't need to go all Nietzschean here, but in the *Phaedo*, Socrates even says that prior to his trial (that is in the extended present of the *Republic*) he thought of "philosophy [w]as the greatest kind of music." (61a) And this is also true for political life; the order and harmony of good cities is articulated by Socrates at least, in part, in musical terms and harmonious metaphors throughout. Obviously, the relationship between *Phaedo* and *Republic* is itself controversial, so I make more precise what I claim through the details of the *Republic* alone.

For, these two considerations are themselves part of the point of the second episode in which Damon is mentioned (in Book IV of the *Republic*). I quote from Shorey's translation:

For a change to a new type of music is something to beware of as a hazard of all our fortunes. For the modes of music are never disturbed without unsettling of the most fundamental political and social conventions, as Damon affirms and as I am convinced.—
424c [Reeve's "the greatest political laws may be better for πολιτικῶν νόμων τῶν μεγίστων.]

Here this is no hint of irony. This passage re-affirms Damon's authority as an accepted expert pertaining to music and, more importantly, its significance to the political art. In addition, we learn that Socrates *agrees* with Damon that innovating in music can be sufficient to undo the stability of the polity. Musical life (be it as an instrument of education or civic festivals) is *constitutive* of the political order. (As I learned from Myles Burnyeat, we may be tempted to

¹⁹ Barker, Andrew, ed. *Greek musical writings: The musician and his art. Vol. 1*. Cambridge University Press, 1989, pp. 168-169.

²⁰ It is a topic that, for example, fascinated Rousseau and Adam Smith in some form or another; both were also keen to reflect on philosophy's role within the division of labor.

put this in terms of ‘culture.’)²¹ Socrates and Adeimantus develop this claim in subsequent paragraphs, so it’s not treated as a mere aside.

So, even if one can be an expert in music without being an expert in politics, Damon is acknowledged by Socrates to be an expert in one of the causes of social/political (in)stability. When it comes to Socrates in the *Republic*, Damon is in some respects, then, more like *Diotima* in the *Symposium* than most of the other learned/sophists to be refuted in Socratic dialogues.

Now, in *Alcibiades* 1, Damon is mentioned by Alcibiades as an advisor to the aging Pericles. And this made me curious if he is mentioned by Plutarch in his life of Pericles.²² In fact, Plutarch introduces Damon by the report that most authors treat Damon as the musical teacher of Pericles. He then states,

Damon seems to have been a consummate sophist, but to have taken refuge behind the name of music in order to conceal from the multitude his real power, and he associated with Pericles, that political athlete, as it were, in the capacity of masseur and trainer. However, Damon was not left unmolested in this use of his lyre as a screen, but was ostracized for being a great schemer and a friend of tyranny, and became a butt of the comic poets.²³

I do not mean to suggest that I take Plutarch as a reliable source here; he seems to be echoing Plato’s depiction of Protagoras on the practice of sophists (*Protagoras* 316d-317b).²⁴ But rather, that Plutarch, too, is inclined to treat Damon not as a (mere) musicologist, but rather as someone who teaches the political art and not without influence in so doing.

With that in mind, if we reflect on Socrates interactions with Damon in the *Republic* we see that Socrates is himself portrayed by Plato as part of a community, who are students of the art of politics, and who also practice judicious deference to each other’s expertise. These features of expertise are obscured by the poets and other producers of confusion about topics on which there is expert knowledge. I treat Socrates, then, as Plato’s exemplar of thinking how philosophy should interact with other forms of expertise in imperfect circumstances even when using their expertise to model the ideal polity.

I suspect we do not tend to notice and emphasize this element about Socrates in the *Republic* for two reasons: first, because of the influential presentation of Socrates in the *Apology* and some other dialogues as a gadfly primarily adept at undermining the exaggerated pretensions

²¹ Burnyeat, Myles F. "Culture and society in Plato's Republic." Tanner Lectures on Human Values 20 (1999): 215-324.

²² I don’t claim priority here. See Lynch 2013, op. cit.

²³ Plutarch. *Plutarch's Lives*. with an English Translation by. Bernadotte Perrin. London. William Heinemann Ltd. 1916. <https://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0007.tlg012.perseus-eng1:4> I have slightly modified the translation.

²⁴ I thank Stephen Menn for urging this.

of others and speaking truth to power. (I leave aside here complex questions about real Socrates vs Plato's Socrates and to what degree Plato's presentation of Socrates changes over time.)

This matters also for a popular understanding of Socrates that resonates also with philosophers today. As represented by Plato in *Republic*, Socrates is himself part of a wider intellectual community, including some with distinct expertise, who are students of politics (and other philosophical and scientific matters). Of course, Socrates does not merely treat Damon as an unquestioned authority; there is clearly sufficient overlapping understanding that some judgments are best understood as converging rather than mere reliance on expert testimony.²⁵

What Plato's depiction of the interaction between Damon and Socrates suggests, is that in imperfect or Nth-best polities philosophy is intrinsically part of an extended division of cognitive labor and, thereby, always requires the aid of other sciences when it has to grapple with the art of government or some such significant activity. In fact, it is no exaggeration to say that to overcome philosophy's dependence on other sciences in the best polity, the *Kallipolis*, nearly all the major social institutions of society need to be reshaped, at least in part, in order to prepare the philosopher for the role of would be king-philosopher.

So, what I have argued in this section is that two issues in ordinary, imperfect polities are intimately linked in the *Republic*: (i) the challenge of securing the fruits of the advanced division of cognitive labor in light of the ordinary social forces – some highly politicized (recall the ship of state) -- that undermine recognition of real skill, including the art of government; and (ii) philosophy's role within the division of cognitive labor. One could write a reception of these themes in Bacon's *New Atlantis*, Cavendish's *Blazing World*, Leibniz's *On the Elements of Natural Science*, Rousseau's three *Discourses*, Smith's *Wealth of Nations*, and, say, Mill's *System of Logic*.

You may worry I have forgotten a promised second reason of why we tend to miss that Socrates is an exemplar of thinking how philosophy should interact with other forms of expertise in imperfect circumstances. However, my recalcitrance in sharing it is that I lack space to justify it. So, I just assert it shamelessly: in his argument for the philosopher's ruling role in *Kallipolis*, Plato invents the myth of philosophy as the queen of the sciences and, in particular, the thought that to be truly scientific one must be philosophical.²⁶ Because of the influence of this argument, recent philosophers, as they confront the epistemic division of labor within the

²⁵ This anticipates Michael Polanyi's views on the republic of letters.

²⁶ Putting it like this is the effect of Eric Brown's comments on an earlier draft.

modern research university, falsely interpret the history of philosophy and its interactions with the sciences as showing that the sciences are the offspring of philosophy.

So if one is in the grip of this mythic narrative one may well think then that Neurathian orchestration, Quine-ean regimentation, Ballantyne's regulative epistemology, Kitcher's version of synthetic philosophy as distinctly *modern* responses to a kind of shift in relative significance and power between philosophy and the sciences. I was in the grip of this very myth back when I published my earlier essay on synthetic philosophy (2019). But short of an ideal polity, philosophy must always situate itself within the division of cognitive labor and that part of its task is to help create the resources of the recognition of real skill given the many challenges to it (see also *Laches* 184-188).

Part II: Synthetic Philosophy,

Back in 2019 I offered a characterization of 'synthetic philosophy' by way of a historical narrative with some illustrations focusing especially on work by Rachel Carson, Daniel Dennett, and Peter Godfrey-Smith.²⁷ Then my motive for offering this characterization was (and remains) that what philosophers of the special sciences (including physics) do is not well captured by the (evolving!) standard conceptions of recent analytic philosophy. I am going to pretend that we know what these are and that there is consensus on them.²⁸ This methodological contrast between analytic philosophy and the philosophy of the special sciences is especially salient for philosophers of science who integrate their work with the history of a special science or ongoing scientific practice.²⁹ I suspect there is a similar contrast between analytic philosophy and the methods of some of those who work in aesthetics, philosophy of math, and logic.

What I mean by 'synthetic philosophy' was articulated in two passages (labelled [A] & [B]) that I quote below. Unfortunately, in my original presentation they are a few pages apart, and many of my readers seems to have focused only on the first passage [A]. So here I quote both together:

[A] 'synthetic philosophy' [is] ...*a style of philosophy that brings together insights, knowledge, and arguments from the special sciences with the aim to offer a coherent*

²⁷ Schliesser (2019), op. cit.

²⁸ Stoljar, Daniel. *Philosophical progress: In defence of a reasonable optimism*. Oxford University Press, 2017. Williamson, Timothy. *The philosophy of philosophy*. John Wiley & Sons, 2021 (first edition 2007). In Williamson, the gap has narrowed a bit because in this second edition he emphasizes philosophy as a modeling activity. On this see also, Paul, Laurie A. "Metaphysics as modeling: the handmaiden's tale." *Philosophical studies* 160 (2012): 1-29. On cost benefit analysis within metaphysics, see Lewis, David, and Stephanie Lewis. "Holes." *Australasian Journal of Philosophy* 48.2 (1970): 206-212.

²⁹ That there is such a distinction is also assumed by Williamson, Timothy. "Philip Kitcher's Purge of Philosophy." *Philosophia* (2024): 1-9.

account of complex systems and connect these to a wider culture or other philosophical projects (or both). Synthetic philosophy may, in turn, generate new research in the special sciences, a new science connected to the framework adopted in the synthetic philosophy, or new projects in philosophy. So, one useful way to conceive of synthetic philosophy is to discern in it the construction of a scientific image that may influence the development of the special sciences, philosophy, public policy, or the manifest image....(pp. 1-2; emphasis added)

[B] Synthetic philosophy requires a general theory such as [Darwinism or] game theory or information theory (and perhaps Bayes' theorem) that is thin and flexible enough to be applied in different special sciences, but rich enough that, when applied, it allows for connection(s) to be developed among them. (pp. 7-8)

I treat **[A]** as offering the 'integrative conception' of synthetic philosophy (see especially the emphasized part). I treat **[B]** as offering a description of what we may call the 'integrative glue.' In my account, the integrative glue is a general purpose theory (or method, or model, or set of techniques, etc.) that can show up in all kinds of disciplines and disciplinary sub-fields. Most of my readers, who correctly discerned I was offering an account of 'post-analytic philosophy' were excited about the integrative conception, and missed (or ignored) what I had to say about the integrative glue.³⁰ In fact, I really wish I had emphasized more that the integrative gluing is, and now I quote Tim Lewens, "conceptually disciplined."³¹ For on my account of synthetic philosophy, the work of synthesis is mediated through a model or general theory or special technique that itself is a site of expertise that can be taught to others. Here I deviate from Plato and Socrates who often seem to deny that the salient skill can be taught. It is worth saying something more about how my original characterization caused confusion. Back in 2019 all my examples of synthetic philosophy were focused on Darwinism. This is no accident. When in the nineteenth century, Spencer dubbed 'synthetic philosophy' (without, it seems, defining it), evolution played at least two integrative roles in his general system. First, as a kind of -- to adopt Dennett's felicitous phrase -- universal acid by which a whole system of metaphysics could be integrated with the special sciences.³² Let's call this first role of synthetic philosophy, 'totalizing.'

³⁰ Levy, Neil. *Bad Beliefs: Why They Happen to Good People*. Oxford University Press, 2021, p. xviii. Novaes, Catarina Dutilh. *The dialogical roots of deduction: Historical, cognitive, and philosophical perspectives on reasoning*. Cambridge University Press, 2020. p. X, p. 22, p. 29; Browning, Heather, and Walter Veit. "Evolutionary biology meets consciousness: essay review of Simona Ginsburg and Eva Jablonka's *The Evolution of the Sensitive Soul*." *Biology & Philosophy* 36.1 (2021).

³¹ Tim Lewens (2014) reviewing Kim Sterelny (2012) *The Evolved Apprentice: How Evolution Made Humans Unique* in *The British Journal for the Philosophy of Science*, 65(1): 185–189. I thank Walter Veit for alerting me to this review, which anticipates many points I would like to stress.

³² Daniel C. Dennett (1995) *Darwin's Dangerous Idea: Evolution and the Meanings of Life* Simon & Schuster

Second, as Darwinism become understood and assimilated as itself a leading theory *within* a range of special sciences these may, thereby, themselves be understood in common with each other (as integral to biology or a science of living or evolving systems). I claimed the second was part of Darwin's achievement in *The Origin of Species*. There is nothing intrinsically totalizing about the second role.

However, post Darwin, Spencer's synthetic project clearly inspired Huxley and Peirce to use Darwinian evolution as a universal acid that could explain and integrate many different phenomena not the least (and now we're definitely totalizing) the origin of the cosmos, cosmic evolution, and the evolution of scientific laws amongst other topics.³³ So it is natural with a provenance like that, when I tried to characterize 'synthetic philosophy,' it was – despite my protestations – understood as synonymous with 'naturalism' and a kind of totalizing impulse.

In addition, without me realizing it, Philip Kitcher had, while drawing on the history of pragmatism, been using 'synthetic philosophy' very much in the spirit that I want to reject. For back in (2012), in his *Preludes to Pragmatism*, Kitcher treats 'synthetic philosophy' as 'integrative world-making' which is constitutive of synthetic philosophy:

Setting aside any further ventures in philosophical midwifery, societies and individuals continue to need an integrated picture of nature that combines the contributions of different areas of inquiry, and different fields of investigation can be assisted by thinkers whose more synthetic perspective can alert them to missed opportunities and provide them with needed clarification.³⁴

Now, while Kitcher himself has rather egalitarian and democratic impulses, this conception of the 'synthetic' – when it goes unmediated by particular technical expertise centered on a particular (sets of) theory, model, or technique – strikes me as risking re-introducing a kind of romantic conception of philosophy as a genius activity in which the philosopher creatively weaves different disciplines together. I view the history of analytic philosophy as a successful revolt against this image of the philosopher. I have no interest in throwing out this baby with the bath water.

So, part of the point of emphasizing **[B]**, that is, that synthetic philosophy requires a general theory -- such as game theory, information theory, Bayes' theorem, Actor-network theory,

³³ Huxley, Thomas Henry. (1887) *The progress of science: 1837-1887*. Royal National Institute for the Blind. Charles S. Peirce (1891) "The architecture of theories." *The Monist*. 161-176.

³⁴ Kitcher, Philip. *Preludes to pragmatism: Toward a reconstruction of philosophy*. Oxford University Press, 2012, p. 215.

causal modeling, Homotopy type theory, agent-based modeling, categorical logic (etc.) -- that is thin and flexible enough to be applied in different special sciences, but rich enough that, when applied, it allows for connection(s) to be developed among them, is that these involve genuine, technical expertise of some sort that is not exhausted by the generic (but also genuine) expertise in arguments and conceptual analysis/clarification/modeling that contemporary analytic philosophy generates.

In general such a general theory can only integrate or bridge different fields locally. Most synthetic philosophy does no more than that. But such general theories do sometimes allow broader and wider forms of integration. So, the totalizing impulse cannot be ruled out.

Part III: Kitcher

Kitcher himself must have felt something like the force of my concern because in recent work, he offers a more focused account of synthetic philosophy. In *What's the Use of Philosophy?* Kitcher praises a particular kind of philosophy of the special sciences; Kitcher dubs it “modus Cartwright” (p. 89) in honor of Nancy Cartwright (and the “Stanford school” (p. 145)).³⁵ Here’s how Kitcher introduces ‘modus Cartwright:’

Again and again, throughout her writings, she offers her readers some facts about areas of scientific work or about social programs, sometimes unfamiliar, sometimes juxtaposing the familiar with the previously unrecognized, points to tensions among them or with standard judgments about them, and offers a perspective on them to resolve the tensions and to make sense of the whole. As I have since reflected on that conversation, I have begun to think she is not alone in coming to her innovative (and sometimes startling) views through this kind of argument—I’ll dub it modus Cartwright, in her honor. It’s all over the history of Western philosophy, at the moments when a thinker is introducing new principles and new concepts (pp. 88-89)

There are six important elements here. In context, this ‘modus’ is contrasted to **(i)** the giving of arguments that has become so characteristic of the way recent analytic philosophy understands itself. In Kitcher’s description we can recognize a few features: **(ii)** the modus presupposes deep knowledge about some (a) scientific discipline or (b) social program (etc.). The practitioner of the modus **(iii)** diagnoses an apparent tension or discordancy within or between these (a&b, etc.). The practitioner of the modus then **(iv)** introduces new principles or concepts (or distinctions, etc.) and, thereby, **(v)** dissolves the tension and, so, **(vi)** makes a new sense of a-b in a new more holistic way. Kitcher himself adds that the scale on which the modus happens can vary (see p. 125; and the remarks on Rawls and Kuhn on pp. 130-1).

³⁵ Kitcher, Philip. *What's the Use of Philosophy?*. Oxford University Press, 2023.

Kitcher insists that he has been trying to practice ‘modus Cartwright’ (p. 89; p. 145). Sometimes Kitcher treats the desired secondary effects [viz., (vi)] in terms of an increase in coherence: “They try to bring order to the phenomena, resolving tensions and increasing coherence.” (p. 133) If I understand him correctly, the activity that falls under (iv), or perhaps the whole modus is what Kitcher calls ‘synthetic’ (p. 130) or ‘synthetic philosophy’ (p. 168) Kitcher seems right that something like the ‘modus’ is ubiquitous in the history of philosophy. Kitcher’s proposal has, for example, a distant family resemblance to the project of coining concepts in Deleuze and Guattari *What is Philosophy?* (Or my notion of “philosophic prophecy.”)³⁶

The modus is characteristic of the synthetic philosophy that Kitcher champions. My criticism of it is that it leaves mysterious the art of synthesis or the manner in which the philosopher generates the material by which coherence is produced. Rather than seeing philosophy as a skilled practice, one that relies on a distinct expertise or intellectual technology, she is, to repeat, the modern incarnation of a kind of romantic, ineffable genius (although one with the luxury to read and reflect). To put it in old-fashioned terms, the context of discovery of the ‘modus’ is black-boxed. Rather than seeing synthetic philosophical as a tool toward characterizing expertise, Kitcher’s characterization leaves mysterious how it can be transmitted itself.

This is not a criticism against the modus. I agree with Kitcher that it exists and is valuable. I also agree that philosophy of the special sciences is in a good position to deploy and enact the modus. (Kitcher does not restrict himself to special sciences; he also lionizes, say, Cavell’s contributions to literature and aesthetics.) But the modus is not sufficient to help us think about the distinctive professional role synthetic philosophers can play inside and outside the discipline.

My alternative proposal for synthetic philosophy is centered on, to repeat, the skilled use or deployment (or reinterpretation, etc.) of a particular somewhat general-purpose model or theory (or technique) and thereby connects or illuminates different special sciences or subfields within the advanced division of cognitive labor. In fact, Kitcher’s skilled deployment of Darwinism throughout his mature writings (including *What’s the Use of Philosophy*—he has an insightful analysis of why the ‘cottage industry’ of ‘evolutionary debunking arguments’ ought not have

³⁶ Schliesser, Eric. "Philosophic prophecy." *Philosophy and its history: Aims and methods in the study of early modern philosophy* (2013): 209-35.

gotten off the ground in the form that they have—) exemplifies the skill (although not the purpose).

To be sure, from my vantage point Kitcher's articulation of the modus is considerable progress compared to his older view of synthetic philosophy. Unfortunately, this much broader picture is also present in *What's The Use of Philosophy*. He often treats this project as synonymous with 'synthetic philosophy' or a 'synthesizing' project; this he often associates with the "best integrated knowledge" (p. 21). I quote an exemplary passage:

Philosophy at its greatest is *synthetic*. It doesn't work beside the various areas of inquiry and culture and practice. Instead, it works between and among them. As Dewey puts the point, it tries to offer the *meanings* of what human beings have come to know. In that consists the successor discipline we need to replace the metaphysics of the past. (p. 54-55; emphasis in Kitcher; see also p. 13)

While Kitcher recognizes that "overreach produces superficiality," (p. 134; p. 136) I part ways with him when he *also* champions "large(r) synthetic" vision(s)/schemes (e.g., p. 56; p. 116; p. 121, p. 132) and wide "synthetic scope" (p. 126, p. 127) whose point is "in supplying synthetic perspectives to help people with the perplexities generated when they think about the world in which they live and about their own place in it." (p. 137)

However, when Kitcher confronts the role he sees for his philosophy he puts the issue like this: "Do the efforts at synthesis generate resources that prove useful, whether for some systematic field of inquiry, or for collective efforts to resolve difficult questions, or for people's attempts to make sense of their lives?" (p. 151) It would be crass not to see the nobility of trying, as Kitcher does, to make philosophy live up to this demand.

Conclusion

Some may be unfamiliar with my previous account of synthetic philosophy. So let me re-emphasize that I consider synthetic philosophy *complementary* to analytic philosophy in so far as a synthetic philosopher's particular expertise in some generic model/theory/science can generate the premises that analytic philosophers use in their arguments and that it is also, simultaneously, a means toward disciplining analytic philosophy. Here what I add to this is that synthetic philosophy may be partially *dependent* on analytic philosophy in so far as synthetic philosophy draws on analytic philosophy's expertise in arguments and practices pertaining to conceptual clarification/modeling/distinctions (etc.) analogous to the way Socrates draws on

dialectics. In synthetic philosophy this philosophical expertise is combined with a foundational skill in some generic scientific/mathematical model/technique.

In virtue of this hybridity, synthetic philosophers combine the fruits of analytic philosophy with a distinct expertise. I have offered this account so as to begin to clarify the nature of expertise in the philosophy of the special sciences (and aesthetics, philosophy of mathematics, and philosophy of logic, etc.). But in imperfect polities like ours, the significance of synthetic philosophy is, in part, also to help secure the fruits of the advanced division of cognitive labor in the context and challenges of hyper-specialization. Synthetic philosophy is a form of expertise that can facilitate some integration among the sciences;³⁷ as well as facilitate a skill that can aid society in navigating the claims of expertise.³⁸

That any of this is so can only be established in light of detailed analysis of particular instances of synthetic philosophy. All I have done here is to suggest that synthetic philosophy is a contemporary way of meeting the challenge of securing the fruits of the advanced division of cognitive labor in light of the ordinary social forces that undermine recognition of real skill; and that a focus on synthetic philosophy is a way to explain the usefulness of professional philosophy within the division of cognitive labor.

I have not argued that synthetic philosophy is the only philosophy worth having. But I have implied that synthetic philosophers are heirs to Socrates' practice as portrayed in *Republic* in the context of political imperfection. Whether synthetic philosophers can speak authoritatively on the greatest and most beautiful things I do not know.³⁹

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³⁷ See also Laplane, Lucie, et al. "Why science needs philosophy." *Proceedings of the National Academy of Sciences* 116.10 (2019): 3948-3952. See, especially, the work by Pradeu including Pradeu, Thomas, et al. "Reuniting philosophy and science to advance cancer research." *Biological Reviews* 98.5 (2023): 1668-1686. Pradeu, Thomas, et al. "Philosophy in Science: Can philosophers of science permeate through science and produce scientific knowledge?." (2021).

³⁸ It does not follow only synthetic philosophy can do this.

³⁹ I thank Neil Levy as well as participants of "Is Philosophy Useful for Science, and/or Vice Versa?" held at Chapman University on January 30 - February 2, 2024 for comments.