In Memoriam: Daniel C. Dennett

Synthetic Philosophy: A Restatement[1]

The guiding thread of the paper is the diagnosis that the advanced division of cognitive labour (that is, intellectual specialization) engenders a set of perennial, political and epistemic challenges (Millgram 2015) that, simultaneously, also generate opportunities for philosophy. In this paper, I re-characterize the nature of synthetic philosophy as a means to advance and institutionalize philosophy. For my definition of synthetic philosophy see section 2.

In section 1, I treat Plato's *Republic* as offering two models to represent philosophy's relationship to the other sciences within the advanced division of labour.[2] I highlight that for Plato intellectual specialization is central not just to economic, but also to political life. And, yet, that the very dispersion of scientific expertise, and its esoteric nature, also generates non-trivial challenges to the recognition and political utilization of knowledge.

From Plato we can infer that in imperfect circumstances, philosophy's self-constitution is, in part, a response to these challenges in political epistemology. However, how philosophy is institutionalized differs through time. In section 2, I re-introduce my conceptualization of synthetic philosophy and restate it. This makes visible that synthetic philosophy is already widely practiced in the profession as philosophy of the special sciences, PPE, formal modelling, public philosophy, etc. I use recent work by Dorst (2023) to illustrate synthetic philosophy and to identify some of the processes that give rise to the need for it.

In sections 2-3, I contrast my account with the evolving ways that Philip Kitcher has conceptualized synthetic philosophy in order to make more precise the version promoted here. I do so not just because Kitcher and I use the same term, 'synthetic philosophy,' but because the temptations inherent in Kitcher's approach should be resisted.

Section 1: Plato's two models of Philosophizing within Intellectual Specialization

Plato's *Republic* offers two models in which philosophy's relationship to the other sciences within the division of labour are treated. One is the just normative ideal (exemplified by the *Kallipolis*) and the other, a more realistic one in an Nth-best polity—which is depicted through Socrates' interactions with his interlocuters 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

---

[1] Some of the material in this paper first appeared in my blog, *Digressionsnimpressions*.
[2] My references to Plato texts are by Stephanus pagination numbers as used at Perseus: https://www.perseus.tufts.edu/hopper/collection?collection=Perseus%3Acorpus%3Aperseus%2Cauthor%2CPlato
I have consulted the translations in Shorey 1968 and Reeve 2004, and specified which one I rely on in context.

labour. But in *Kallipolis* the division of labour and human nature are, at least in part, transformed. I focus on the more realistic model in what follows. The portrayal of Socrates' interactions helps diagnose a set of problems that are still with us. In the imperfect polity, Socrates is shown to recognize salient expertise in a neighbouring scientific practice that furnishes him with the tools to develop or at least begin to justify some of the details of *Kallipolis*.

I then focus on the significance of an easily overlooked character, Damon, mentioned in *Republic*. If we take the relationship between Socrates and Damon seriously then we discern that in modelling imperfect polities, Plato inscribes Socrates within the advanced division of cognitive labour who defers to an expert on a key feature of the art of government.

I start my argument by stating something uncontroversial: the division of labour plays a very important role in Plato's *Republic* (e.g., 455b-c; Greco 2009). It is, for example, the cause of *all* political life (369c). The division of labour responds to human need but is itself the effect of human diversity (370b; see also 443c). In addition, this diversity is, at least, in part cognitive in character (cf. 371de; 415).

The division of intellectual labour is also diagnosed as a source of problems in political life. We can discern this in one of Socrates' late arguments for the 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 (2024) notes, in Book X, Socrates argues "that poets do not know what they are talking about." 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.[3]

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

---

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

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 just before that if somebody mentions, "that he has met a man who knows all the crafts and everything else that 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 labour 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.[4]

Now, within the advanced division of cognitive labour, Socrates' criticism generalizes to *all* who, lacking the field-specific training, portray or discuss what we might call field-specific expertise. (Millgram 2015.) So, this does not just describe what we now call 'content producers' in the arts and entertainment, but in our age also consultants, journalists, the intelligentsia, and internet gurus.[5]

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 such ignorance-sowing exists 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)[6]

In what follows Socrates uses the fact that (i) Pythagoras inspired and was honoured 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

---

[4] I thank Eric Brown for providing me with this way of phrasing.
[5] This is a reason why bullshit (in Frankfurt's sense) about, say, campus life can proliferate so easily without check in the public sphere.
[6] It is possible that some (Aristotle, Leibniz, Whewell, Madame Curie, etc.) have expertise in many fields; like the philosopher-kings of *Kallipolis*, they will need considerable training to get there.

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 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 polities).

There may be some mockery in Socrates' description of the popularity of Protagoras and Prodicus.[7] 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 management can offload responsibility on them.[8] 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 with his implied audience 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; Plato illustrates this in the central metaphor of the ship of state—as piloting a ship is a real skill, so is the art of government (488de).[9] This is also the point of Plato's *Statesman* (Lane 2006). In fact, the charge against the poets in *Republic* Book X is strictly analogous to the charge against the dangerous wealthy–Machiavelli would call these the '*Grandi*'–and demagogic political elites 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.

In the best city the art of government requires, on Socrates' view, 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,

---

[7] Socrates' attitude toward Prodicus is a complex matter anyway. (Cf. Corey 2008; Lynch 2013.)
[8] I thank Ryan Muldoon for suggesting this way of phrasing.
[9] See also Sophocles, *Oedipus Tyrranus*, line 922-3 and 55-6.

undergo the marriage lottery, etc.[10] This is familiar enough, although I say something of its significance below.

By now I hope I've succeeded in reminding you that it is uncontroversial that one of the major sub-themes of the *Republic* is the necessity of the division of cognitive labour and how it, in turn, generates the politically salient challenge how to secure its fruits in light of the ordinary social forces that undermine recognition of real skill, including the art of government.[11] 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 how 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 (Lynch 2013).[12] 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: 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 *Kallipoli*s the purified (civic) religion, including (quoting Reeve's translation) "the

---

[10] What the origin of the art of government in *Statesman* is, 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 (Lane 2006). I thank Justin Vlasits for discussion.

[11] The necessity is at least two-fold: it's required to meet our basic needs and the attainment of justice. I thank Sophie-Grace Chappell for pressing this.

[12] Lynch emphasizes the warmth with which Plato often describes Prodicus and his pupil Damon.

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, in legislating for the best polity, 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 and authority. 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 labour of the expertise required for the principles of political life.

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* (Lynch (2013)). This matters because it shows that in imperfect conditions, the Socratic legislative art is not self-sufficient, but part of a wider division of cognitive labour 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 (Brown 2023).

That is, the conditions to found a *Kallipoli*s 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 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 (Barker 1989: 168-9). 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. 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 labour.

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 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 there 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. We may be tempted to put this point in terms of 'culture' (Burnyeat (1999)). 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 (Lynch 2013). 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.--
> (Plutarch 1916)[13]

I do 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).[14] 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's 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 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, as Michael Polanyi would argue more recently, clearly sufficient overlapping understanding that some judgments are best understood as converging rather than mere reliance on expert testimony.

What Plato's depiction of the interaction between Damon and Socrates suggests, is that in imperfect polities philosophy is intrinsically part of an extended division of cognitive labour and, thereby, always requires the aid of other sciences in the circumstance that it has to grapple with the art of government or some such significant activity.[15] In fact, it is no exaggeration to say that to overcome philosophy's dependence on other sciences in the best polity, the

---

[13] I have slightly modified the translation.
[14] I thank Stephen Menn for urging this.
[15] I thank Brennan McDavid for suggesting the phrasing.

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) in the art of government the challenge of securing the fruits of the advanced division of cognitive labour in light of the ordinary social forces – some highly politicized (recall the ship of state)–that undermine recognition of real expertise; and (ii) philosophy's role within the division of cognitive labour. 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*.

I lack space to justify the 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. So, I 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.[16] Because of the influence of this myth, recent philosophers, as they confront the epistemic division of labour within the 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, as I was (Schliesser 2011 & 2019), one may well think that Enlightenment encyclopedism, Neurathian orchestration, Quine-ean regimentation, and (say) Ballantyne's regulative epistemology are distinctly *modern* responses to a shift in relative authority between philosophy and the sciences. Yet, short of an ideal polity, philosophy must always situate itself within the division of cognitive labour and that part of its task is to help create the resources of the recognition of real skill given the many challenges to it (cf. *Laches* 184-188).

Section II: Synthetic Philosophy, a restatement

When I first offered a characterization of 'synthetic philosophy,' I did so by way of a historical narrative with some illustrations focusing especially on work by Rachel Carson, Daniel Dennett, and Peter Godfrey-Smith (Schliesser 2019). Then my motive for offering this characterization was (and remains) that what philosophers of the special sciences (including

---

[16] I thank Eric Brown for helping me conceptualize this. Condorcet attributes an account much like this to Aristotle under the influence of Plato (Condorcet 1795: 82-83).

physics) do is not well captured by the (evolving) standard conceptions of recent analytic philosophy. For the sake of argument, I pretend that we know what these are and that there is consensus on them (Stoljar 2017; Williamson 2021).[17] This methodological contrast between analytic philosophy and the philosophy of the special sciences is especially salient for philosophers of science who work in PPE or integrate their work with the history of a special science or ongoing scientific practice (see also Williamson 2024). I suspect there is a similar contrast between analytic philosophy and the methods of some of those who work in aesthetics, philosophy of maths, and logic.

However, how others drew on my paper, instructed me about an ambiguity in my position. 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 seem to have focused only on the first passage **[A].** Here I quote both together:

> **[A]** 'synthetic philosophy' …*brings together insights, knowledge, and arguments from the special sciences with the aim to offer a coherent 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….(Schliesser 2019: 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. (Schliesser 2019: 7-8)

I treat **[A]** as offering the 'integrative conception' of synthetic philosophy (see the emphasized part). I treat **[B]** as offering a description of what we may call the 'integrative glue.' In my account, this 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.[18]

Readers seemed excited about the integrative conception, and missed (or ignored) what I had to say about the integrative glue (e.g., Novaes 2020: x, 22, 29; Novaes forthcoming; Levy 2021:

---

[17] In the second edition of Williamson (2021) philosophy is reconceptualized as a modelling activity which is more compatible with the view articulated here. See Paul (2012). On cost-benefit analysis within metaphysics (Lewis & Lewis (1970)).

[18] In correspondence, Daniel Stoljar has noted that while some of these glues are fairly innocuous bits of mathematics others are by no means ontologically neutral. One implication is that which 'glue' to use in one's synthetic philosophy is not a risk-free activity and that synthetic philosophers may well disagree with each other when doing metaphysics or ontology, etc.

xviii; Browning & Veit). I wish I had emphasized more that the integrative gluing is, and now I quote Tim Lewens, "conceptually disciplined" (Lewens 2014: 185).[19] 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.

Something more can be noted about why 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 (1995) felicitous phrase–universal acid by which a whole system of metaphysics could be integrated with the special sciences. Let's call this first role of synthetic philosophy, 'totalizing.'

Second, as Darwinism became 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* (Schliesser 2019). There is nothing intrinsically totalizing about the second role.

However, post Darwin, Spencer's synthetic project inspired Huxley (1897 [1887]) and Peirce (1891) to use Darwinian evolution as a universal acid that could explain and integrate many different phenomena, not least (and now we're definitely totalizing) the origin of the cosmos, cosmic evolution, and the evolution of scientific laws amongst other topics (Schliesser forthcoming).[20] For example, Huxley writes, "Evolution, as a philosophical doctrine applicable to *all* phenomena, whether physical or mental, whether manifested by material atoms or by men in society, has been dealt with systematically in the "Synthetic Philosophy" of Mr. Herbert Spencer" (Huxley 1898: 102, emphasis added). So it is natural that, with a provenance like that, 'synthetic philosophy' 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 reject. For in his *Preludes to Pragmatism*, Kitcher treats 'synthetic philosophy' as 'integrative world-making' which is constitutive of synthetic philosophy:

---

[19] I thank Walter Veit for alerting me to this review, which anticipates many points stressed here.
[20] I thank Trevor Pearce for alerting me to Peirce (1891).

> 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. (Kitcher 2012: 215)

While Kitcher himself has rather egalitarian and democratic impulses, this conception of the 'synthetic' – when it goes unmediated by particular technical expertise centred on a particular (sets of) theory, model, or technique (viz, the integrative glue) – 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 (which has roots in *Statesman* 279-280). I view the history of analytic philosophy as a *successful* revolt against this image of the philosopher. Synthetic philosophy is post analytic philosophy.

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, rational choice theory, Actor-network theory, causal modelling, Homotopy type theory, agent-based modelling, 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 technical expertise of some sort that is not exhausted by the generic (but also genuine) expertise in arguments and conceptual analysis/clarification/modelling that contemporary analytic philosophy generates. Cultivating this somewhat one-sided focus on in-depth technical expertise of such a general theory is not part of Socrates' practice in imperfect political circumstances (e.g., *Phaedo* 96c); I am not enlisting Socrates as synthetic philosopher *avant la lettre*.

Here I offer a stylized example of synthetic philosophy distinct from Darwinism. This example also reinforces my underlying argument in political epistemology about the effects of specialization. So, I offer the example as a token of synthetic philosophy and as developing my use of Plato in Section 1 on the conditions that give rise to the need for something like synthetic philosophy.

About a century ago, as Friedman (2019) notes, Walter Lippmann realized that in a mass and technologically complex society like ours even good faith reporting would produce very partial pictures of social reality. Lippmann (a journalist) was not naïve about this, because he had experienced massive amounts of propaganda from all sides during World War I. Lippmann's underlying argument is one that philosophers of science would call an 'underdetermination argument.' Even with the same set of facts, one can have quite different theories or

interpretations of them. Moreover, in mass, differentiated societies like ours, it is by no means obvious people accept the same set of underlying facts. Let's call this last feature a 'higher-order underdetermination thesis' (hereafter: HOUT). Friedman (2019) strengthens Lippman's HOUT by treating the need for interpretation of evidence as another source of underdetermination that can generate what Friedman calls a 'spiral-of-conviction' (Friedman 2019: 241-3).

Even though Lippmann's (1922) *Public Opinion* was foundational to modern media studies, the position in the previous paragraph was not mainstream. This was so for two reasons: first, by a view (falsely!) attributed to Mill's liberalism that in a market place of ideas free discussion would converge on the truth over time (Gordon 1997). This faith was reinforced by the intellectual commitment that goes back to the Stoics that rational people think alike. Second, in modern times this intellectual commitment had received support from a very clever and influential argument relying on some Bayesian machinery, that was treated as implying that over time rational 'updating' would lead to convergence: "Our result implies that the process of exchanging information on the posteriors for A will continue until these posteriors are equal" (Aumann 1976: 1238).

Crucially, Aumann's argument relies on a common knowledge assumption (Lederman 2015), which in the context of Lippmann's HOUT may be thought question-begging. Now, one way to block HOUT, is to treat science as the source of authoritative common knowledge (cf. Levy 2021 and Schliesser 2022). Even then, one might still worry that science is not a pure communicative community because of incentives to keep some science embargoed–say, for defence or financial reasons–or unpublished due to, say, lack of interest in replication (Lefevere & Schliesser 2014). But such reservations about Aumann 1976 did not receive much attention. Disagreement with a scientific consensus would seem irrational, or the victim of 'fake news.'

In a recent paper, Kevin Dorst uses Bayesian updating to show that "ambiguity is necessary and sufficient for the rationality of predictable polarization." Ambiguity here means "evidence that is hard to know how to interpret" (Dorst 2023: 357). In fact, he uses this to show that the very mechanisms that may make us individually more rational can facilitate group polarization, and even a "drift away" from the truth (Dorst 2023: 359).

Dorst's argument helps to make sense in a precise way of a widely experienced phenomenon, but is simultaneously also a contribution to a massive empirical literature on polarization in media studies, sociology, and political science without having to assume that an 'other side' is automatically irrational. More subtly, it suggests that merely following reported science is not sufficient to guard against either such polarization, or being wrong (Schliesser & Winsberg

(2020); Winsberg & Harvard (2024); Schliesser (2022); Winsberg (2024)). Dorst's use of Bayesian tools allows one to connect insights from science, philosophy of science, political philosophy, and political epistemology.

To return to my main argument, the kind of techniques/methods/general theories that are instances of synthetic philosophy can, by drawing connections between distinct lines of inquiry, integrate or bridge different fields locally and, thereby, potentially generate new scientific *or* philosophical fields. Most synthetic philosophy does no more than that. But, as my examples suggest, synthetic philosophers may identify questions that require further investigation–perhaps even spawning new disciplines or lines of inquiry–or alternatively providing conceptual clarity to existing debates. Such general theories do sometimes allow broader and wider forms of integration. This totalizing impulse may be fruitful, but it also risks a new mysterianism.

Section III: Kitcher and Totalizing Philosophy

Kitcher himself must have felt something like the force of my concerns about his approach because in recent work he offers a more focused account of synthetic philosophy. In *What's the Use of Philosophy?* Kitcher recognizes that "overreach produces superficiality," (Kitcher 2023: 134 & 136), and he praises a particular kind of philosophy of the special sciences. Kitcher dubs it "modus Cartwright" (Kitcher 2023: 89) in honour of Nancy Cartwright (and the "Stanford school" (Kitcher 2023: 145)). 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 (Kitcher 2023: 88-89)

There are six important elements here. In wider context not quoted here, this 'modus' is contrasted by Kitcher to **(i)** the giving of arguments that has become so characteristic of the way recent analytic philosophy understands itself (e.g., Stoljar 2017). In Kitcher's description we can recognize a few features: **(ii)** the modus presupposes deep knowledge about some (a) scientific discipline that is not philosophy 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 Kitcher 2023: 125; and the remarks on Rawls and Kuhn (Kitcher 2023: 130-1)).

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" (Kitcher 2023: 133). If I understand him correctly, the activity that falls under **(iv),** or perhaps the whole modus, is what Kitcher calls 'synthetic' or 'synthetic philosophy' (Kitcher 2023: 130 & 168).

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 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 philosophy as a tool toward characterizing expertise, Kitcher's characterization leaves mysterious how it can be transmitted. 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 centred 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 labour. Kitcher's deployment of Darwinism throughout his writings exemplifies the skill.

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 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" (Kitcher 2023: 21); "large(r) synthetic" vision(s)/schemes (e.g., Kitcher 2023: 56; 116; 121; 132); and wide "synthetic scope" (Kitcher 2023: p. 126-127)). 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. (Kitcher 2023: 54-55 & 13; emphasis in Kitcher)

Conclusion

In conclusion, let me re-emphasize that synthetic philosophy, properly understood, is *complementary* to analytic philosophy insofar 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. In fact, synthetic philosophy may be partially *dependent* on analytic philosophy insofar as synthetic philosophy draws on analytic philosophy's expertise in arguments and practices pertaining to conceptual clarification/modelling/distinctions (etc.) analogous to the way Socrates draws on dialectics. Perhaps, the competence that analytic philosophy conveys is the more general art of recognizing conceptual patterns.[21] In synthetic philosophy this philosophical skill is combined with a foundational expertise 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 and justification for synthetic philosophy are, in part, also in its possible use to help secure the fruits of hyper-specialization. Synthetic philosophy is a form of expertise that can facilitate some integration among the sciences and give birth to new scientific knowledge (Laplane et al. 2019: Pradeu et. al. 2021 & 2024). I have also claimed it can facilitate a skill that can aid society in navigating the claims of expertise.

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 labour 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.

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

---

[21] I thank Kian Mintz-Woo for helping me formulate it like this.

the context of political imperfection. Whether synthetic philosophers can speak authoritatively on the greatest and most beautiful things I do not know.[22]

Eric Schliesser, June 27, 2024, nescio2@yahoo.com

Reference Section

Aumann, R. J. 1976. "Agreeing to disagree" *The Annals of Statistics*, 4(6), 1236–1239.

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

Brown, Eric. 2023. "Socratic Methods" in *The Bloomsbury Handbook to Socrates* edited by Jones, Russell E., Ravi Sharma, and Nicholas D. Smith, eds. Bloomsbury Publishing, Chapter 3.

Browning, Heather, and Walter Veit. 2021. "Evolutionary biology meets consciousness: essay review of Simona Ginsburg and Eva Jablonka's The Evolution of the Sensitive Soul." *Biology & Philosophy* 36.1.

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

Condorcet, Marie-Jean-Antoine-Nicolas. 1795. *Outlines of an historical view of the progress of the human mind*. M. Carey.

Corey, David. 2008. "Prodicus: Diplomat, sophist and teacher of Socrates" *History of Political Thought* 29.1: 1-26.

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

Dorst, Kevin. 2023. "Rational polarization" *Philosophical Review* 132.3: 355-458.

Friedman, Jeffrey. 2019. *Power without knowledge: a critique of technocracy*. Oxford University Press.

Gordon, Jill. 1997. "John Stuart Mill and the" Marketplace of Ideas," *Social theory and practice* 23.2: 235-249.

Greco, Anna. 2009. "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: 52-72.

Griswold, Charles L., 2024. "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/, section, "3.3 Republic X."

Huxley, T.H. 1898. [1887] "The progress of science: 1837-1887" in *Methods and Results: Essays* [Collected Essays by T.H Huxley, volume 1], Macmillan & Co.

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

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

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

Lane, Melissa. 2006. "Plato's political philosophy: the Republic, the Statesman, and the Laws." *A companion to ancient philosophy* 25: 170-191.

Laplane, Lucie, et al. 2019. "Why science needs philosophy" *Proceedings of the National Academy of Sciences* 116.10: 3948-3952.

Lederman, Harvey. (2015) "People with common priors can agree to disagree" *The Review of Symbolic Logic* 8.1: 11-45.

Lefevere, Merel, & Eric Schliesser. 2014. "Private epistemic virtue, public vices: moral responsibility in the policy sciences" *Experts and Consensus in Social Science*. Springer. 275-295.

Levy, Neil. 2021. *Bad Beliefs: Why They Happen to Good People*. Oxford University Press.

Lewens, Tim. 2014. "Review of Sterelny" *The British Journal for the Philosophy of Science*, 65:1: 185–89.

Lewis, David, and Stephanie Lewis. 1970. "Holes" *Australasian Journal of Philosophy* 48.2: 206-212.

Lippmann, Walter. 1922. *Public opinion*. Harcourt Brace & Co.

Lynch, Tosca. 2013. "A Sophist 'in disguise': a reconstruction of Damon of Oa and his role in Plato's dialogues," *Études platoniciennes* 10. http://journals.openedition.org/etudesplatoniciennes/378

Novaes, Catarina Dutilh. 2020. *The dialogical roots of deduction: Historical, cognitive, and philosophical perspectives on reasoning*. Cambridge University Press.

Novaes, Catarina Dutilh. Forthcoming. "A plea for synthetic philosophy."

Paul, Laurie A. 2021. "Metaphysics as modeling: the handmaiden's tale." *Philosophical studies* 160: 1-29.

Peirce, Charles S. 1891. "The architecture of theories." *The Monist*. 161-176.

Plutarch. 1916. *Plutarch's Lives*. with an English Translation by. Bernadotte Perrin. London. William Heinemann Ltd.

https://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0007.tlg012.perseus-eng1:4

Pradeu, Thomas, et al. 2024. "Philosophy in Science: Can philosophers of science permeate through science and produce scientific knowledge?" *The British Journal for the Philosophy of Science* 75.2

Pradeu, Thomas, et al. 2023. "Reuniting philosophy and science to advance cancer research." *Biological Reviews* 98.5: 1668-1686.

Reeve, C.D.C. 2004. *Plato: Republic*, Translated by C.D.C. Reeve. Hackett.

Schliesser, Eric. 2011. "Newton's challenge to philosophy: A programmatic essay" *HOPOS: The Journal of the International Society for the History of Philosophy of Science* 1.1: 101-128.

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

Schliesser, E. 2022. "Review of *Bad Beliefs: Why They Happen to Good People*: Levy, Neil, *International Studies in the Philosophy of Science*, 35.2: 189–203.

Schliesser, E., & Winsberg, E. 2020. *Climate and coronavirus: the science is not the same. New Statesman*. https://www.newstatesman.com/business/economics/2020/03/climate-coronavirus-science-experts-data-sceptics

Schliesser, Eric. Forthcoming. "On the Nature and Impact of Synthetic Philosophy on Cosmogenic Speculation" in *Science and the shaping of modernity: Studies in honour of Stephen Gaukroger* edited by Anik Waldow & Charles Wolfe Springer.

Shorey, Paul 1969. *Plato. Plato in Twelve Volumes, Vols. 5 & 6* translated by Paul Shorey. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd.

Stoljar, Daniel. 2017. *Philosophical progress: In defence of a reasonable optimism*. Oxford University Press.

Winsberg, Eric. Forthcoming. "Falsehoods Fly: Why Misinformation Spreads and How to Stop It, by Paul Thagard, a review essay." *Journal of Value Inquiry*.

Winsberg, Eric, and Stephanie Harvard. 2024. *Scientific models and decision making*. Cambridge University Press.

Williamson, Timothy. 2021, second edition. *The philosophy of philosophy*. John Wiley & Sons.

Williamson, Timothy. 2024. "Philip Kitcher's Purge of Philosophy" *Philosophia*: 1-9.