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The Dialectics of Objectivity

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Abstract:

This paper develops under-recognized connections between moderate historicist methodology and character (or virtue) epistemology, and goes on to argue that their combination supports a “dialectical” conception of objectivity. Considerations stemming from underdetermination problems motivate our claim that historicism requires agent-focused rather than merely belief-focused epistemology; embracing this point helps historicists avoid the charge of relativism. Considerations stemming from the genealogy of epistemic virtue concepts motivate our claim that character epistemologies are strengthened by moderate historicism about the epistemic virtues and values at work in communities of inquiry; embracing this point helps character epistemologists avoid the charge of objectivism.

Keywords: historiography, virtue epistemology, naturalism, objectivity, thick

concepts, underdetermination problem

1. Introduction: Thick Concepts and a Thicket of Problems

Debate over historiography and its methods is already witness to a number of instances where historicist thinkers have appealed to one or another form of character epistemology. But it is still not widely recognized that historicism and virtue theory are mutually supportive in ways that make attempts to combine them philosophically appealing or advantageous. To show this it will be argued that considerations stemming from underdetermination problems show that historicism requires agent-focused rather than merely belief-focused epistemology. It will also be argued that considerations stemming from the genealogy of epistemic virtue concepts show that character epistemologies are strengthened by moderate historicism about the epistemic virtues and values at work in communities of scientific inquiry.

So the advantage of the admixture of moderate historicism and character epistemology for philosophers, and for philosophers of history in particular, is this paper's *constructive thesis*. Historicism has been much-discussed by philosophers of history, but what does character (or virtue) epistemology bring to the table? Among the general advantages that character epistemologies have over their belief-focused rivals is their ability to explain the important roles that “thick” concepts play in guidance of research strategies and in theory confirmation across the sciences and humanities. I will attempt to show why

this is important for philosophers of history and for everyone concerned with the relationship between the physical and the social sciences.

Section 2 introduces the *constructive thesis* by identifying a dialectical conception of objectivity as a shared theme of authors who have already partially combined their moderate historicism with some version of virtue epistemology. I provide four somewhat different examples of such an approach. The *constructive thesis* is picked up again in Section 5, where we examine more closely at the thick concepts on which the dialectical model revolves. “Calling them ‘virtues’ rather than ‘values’ draws attention to their status as attributes at once objective and desirable”,¹ and we develop both this Janus-faced conception of virtue theory and how moderate historicism aids in the achievement the tasks that it sets for itself. Yet as we’ll see the methodological functions thick concepts commonly play in heuristic advice and in theory confirmation vary substantially with one’s field or discipline; they do not appear to track the traditional distinctions between “hard” and soft” sciences, “explanatory” and “interpretive” theories, etc.

To see what they *do* track we will first need to ask why some historiographers appeal primarily to *impersonal* theory virtues as ampliative (non-deductive) desiderata of theory choice, while others instead appeal to the *personal* character or *bon sens* of researchers themselves. Are we more tempted to dispense with this distinction between theory virtues

¹ E. McMullin, “The Virtues of a Good Theory”, *The Routledge Companion to Philosophy of Science*, eds. M. Curd and S. Psillos (Routledge, 2009), 501.

and personal virtues in some fields of research than in others? This is the burden of Sections 3 and 4, and the *diagnostic thesis* I develop in these two sections answers these questions in a way that further supports to the *constructive thesis* when we return to it. Ernan McMullin rightly notes that “Discussion of theory virtues exposes a fault-line in philosophy of science that [separates] very different visions of what the natural sciences are all about”. The *diagnostic thesis* might be seen as developing this point to expose fault-lines both narrower (*within* historiography) and wider (*between* disciplines) than McMullin intended.² My thesis regarding the latter debates is that the weight that authors accord to a) empirical testing, b) impersonal theory virtues, and c) the personal intellectual traits of inquirers typically reflects the conception that they have of what constitutes objectivity within their own discipline. The *diagnostic thesis* also and for the same reason has something to say about the nature of the fault lines between historians themselves over how to understand historiographic methods. It more specifically explains why philosophically-inclined historians who antecedently hold substantially different conceptions of what constitutes historiographic objectivity have tended to adopt and support *distinct versions* of virtue epistemology. Historiographers today appeal to *different* versions of character epistemology for reasons that we can articulate, and once articulated this provides some new tools for mediating their disputes, which is just what we should constructively want to do.

² McMullin, “The Virtues of a Good Theory”, 506.

2. First Outlines of a Dialectics of Objectivity

Authors who exemplify a combination of historicist assumptions and virtue theory appear to maintain that historiographic objectivity as they understand it entails a “condition of character”³ of some weaker or stronger sort. Their accounts, insofar as they involve themselves in questions about what constitutes norms of historiographic objectivity, all appear to be variations of a dialectical conception, something that sets them off from accounts of disciplinary objectivity that are not part of this family.

Now objectivity has often been denatured by both universalizing proponents and reactionary critics. But for any character epistemologist, objectivity is an achievement concept. It is an ideal with widely varying applications in the scholarly domains in which it plays a methodological role, yet with abiding value. The achievement that objectivity represents, and that other terms like “neutral”, and “value free”, fail to capture, partly explains its enduring value of the ideal as I see it. A “dialectics” of objectivity suggests a negotiative conception of the means and ends of inquiry, one with clear reference to the active, adjectival sense of the objective *inquirer*. In historiography and in *praxis*-oriented accounts of method in some other fields as well, objectivity has sometimes even as we’ll see been developed *primarily* as a virtue concept, one attended by various sub-virtues — “virtues of self-distanciation” — as Thomas Haskell and Herman Paul both refer to them.⁴

³ M. Bevir, *The Logic of the History of Ideas* (Cambridge University Press, 1999), 104.

⁴ See for instance H. Paul, “Distance and Self-Distanciation: Intellectual Virtue and Historical Method

We can utilize Allan Megill to give this thesis some initial credibility, showing that the term is already recognized in the literature. In *Rethinking Objectivity* (1994) Megill outlines four competing senses of objectivity: the absolute, the disciplinary, the dialectical, and the procedural:

A striking feature of both absolute and disciplinary conceptions of objectivity is their negative relation to subjectivity. Absolute objectivity seeks to exclude subjectivity; disciplinary objectivity seeks to contain it.... Phrases like ‘aperspectival objectivity’ and ‘view from nowhere’ really draw attention to... negativity. In contrast, dialectical objectivity involves a positive attitude toward subjectivity. The defining feature of dialectical objectivity is the claim that subjectivity is indispensable to constitute the objects. Associated with this feature is a preference for ‘doing’ over ‘viewing’... in other words, *subjectivity* is needed for *objectivity*; or, as Nietzsche put it, ‘objectivity is required, but is a positive quality.’⁵

While other approaches to objectivity may also be able to recognize the interplay with contrary conceptions of method, Megill takes the special emphasis of a dialectical approach as how something is constituted as an object for inquiry through interplay between researchers and

Around 1900”, *History and Theory, Theme Issue 50* (2011), 104-116; also T. Haskell, *Objectivity Is Not Neutrality: Explanatory Schemes in History* (Baltimore: John Hopkins University Press, 2000).

⁵ A. Megill (ed.), *Rethinking Objectivity* (Durham, NC: Duke University Press, 1994), 8.

that which they study. Objectivity, proponents of a dialectical model hold, is not a property of a right method or a steady state, but rather describes a *process* carried out actively through communicative interaction and comparison. Now my claim would be that researchers who combine their historicist assumptions with some form of virtue epistemology are among the fittest champions of the dialectical model which Megill has introduced for us. In order to show this, let me now give brief descriptions of four such authors. While the emphasis in this section is on the many substantial *similarities* between them, these descriptions will also serve to introduce certain differences that will be our direct focus in the Section which follows.

Our first example of a dialectical conception is Mark Bevir's chapter, "Objectivity" in his *Logic of the History of Ideas* (1999). Bevir calls for epistemology to take an anthropological turn: "We must define objectivity as a human practice based on intellectual virtues. When people debate the merits of rival theories, they engage in a human practice governed by rules of thumb which define a standard of intellectual honesty". Objectivity in the history of ideas, Bevir's special focus, he thinks "rests on a combination of agreement on certain facts, an extensive use of criticism, and a comparison of rival views in relation to clearly defined criteria. Historians cannot pronounce their particular theories to be decisively true or false, but they can make rational decisions between rival webs of theories, and thereby pronounce their theories to be the best currently available to us."⁶ Again later he writes,

⁶ Bevir, *The Logic of the History of Ideas*, 112-113.

Our logic of comparison contains a form of justification appropriate to the history of ideas. Historians can justify their theories by showing them to be objective, where objectivity arises not out of a method, nor a test against pure facts, but rather a comparison with rival theories. Historians can justify their theories by relating them, in a comparison with their rivals, to criteria of accuracy, comprehensiveness, consistency, progressiveness, fruitfulness, and openness.⁷

Bevir's criteria for theory choice among competing histories is a set of thick concepts, epistemic virtues that he thinks are clearly defined and accepted by most practitioners in the history of ideas. The majority of them are cognitive values or *theory virtues* (virtues of theories and hypotheses) framed in impersonal language.⁸ We will simply term them *theory virtues* when we return to look more closely at Bevir's account.

A second example of a dialectical conception of objectivity is Jon A. Levisohn's paper, "Negotiating Historical Narratives" (2010). There he writes that,

Historiographical inquiry is appropriately characterized as a negotiation among narratives; the historical narratives, rather than emerging from the inventive mind of the

⁷ Bevir, *The Logic of the History of Ideas*, 143.

⁸ Ernan McMullin says that "Calling them 'virtues' rather than 'values' draws attention to their status as attributes at once objective and desirable". McMullin, "The Virtues of a Good Theory", 501.

historian, are generated by a process of negotiations; and ...this conceptualization enables us to escape from the picture of historical narratives being imposed by the historian on an unnarrativised past... Moreover, [this] descriptive account also contains the seeds of the normative account of what makes one narrative better rather than worse. The quality of the narrative is a function of the quality of the negotiation, of how successfully—artfully, seamlessly, elegantly, insightfully—the historian negotiates among in integrates the various elements that she encounters or introduces into the inquiry. As we conceptualize the goals of history education, the cultivation of these interpretive virtues is a good place to start.⁹

Levisohn views historical narratives as inevitably evolving over time, since every generation brings new questions and perspectives to bear on historical personages, events, or eras of the past. In asking whether we have gotten the historical story right, “we implicitly are asking whether we carried out the task of negotiating among narratives with responsibility, with the right kind of creativity, with openness to disconfirmatory evidence, and with that particular

⁹ J.A. Levisohn, “Negotiating Historical Narratives: An Epistemology of History for History Education”, *Journal of Philosophy of Education*, 44:1 (2010), 18. “Each of the qualities just mentioned—responsibility, creativity, openness to disconfirmatory evidence, boldness, modesty-- can be understood as virtues of historical inquiry” (17). For a fuller development, see his *The Interpretive Virtues: A Philosophical Inquiry into the Teaching and Learning of Historical Narratives* (Wiley-Blackwell, 2011 forthcoming).

combination of boldness and modesty that marks good historiography—boldness that accompanies a story that we believe others ought to endorse, together with the modesty that derives from our knowledge of the ways that historical interpretations change over time” (17).

Herman Paul is our third example; “Inspired by a ‘performative turn’ in the history and philosophy of science”, his paper “Performing History” “focuses on the historian’s ‘doings’ and proposes to analyze these performances in terms of epistemic virtue”.¹⁰ He clearly sees virtue-based evaluations as a post-positivist approach to professional conduct, and to quality assessment for historiographers. Paul also argues that that “[W]hereas historical scholarship is shaped by epistemic virtues, such virtues, in turn, are shaped by historical contexts”.¹¹ His work elaborates this dialectic between professional norms and historical contexts and goes on to suggest strong connections between the evaluation of historiographic practices or “doings” and evaluating the traits of character of actual agents who perform the research.

While Levisohn emphasizes that exemplars of good research, and even personal traits (including internal motivations) of ideal inquirers taken more abstractly, are important pedagogically for students of history-writing, Paul more explicitly presents them as playing a “constitutive role” in the acquisition of scholarly knowledge. For Paul, virtue

¹⁰ Paul, “Performing History”, 1.

¹¹ H. Paul, “Performing History: How Historical Scholarship is Shaped by Epistemic Virtues”, *History and Theory*, 50 (2011), 1–19, 11.

theory of a sort that focuses on personal traits of researchers adds depth and specificity to the “virtuous performances” that historians and others already recognize as normative for professional conduct. Paul also wants to insist that the value of virtue concepts for historiographical practice is not only retrospective (reconstructive), but prospective (heuristic) as well. When we return to further examine Paul’s account, we will refer to the *kind* of epistemic virtue he and Levisohn focus upon as *personal virtues* in order to contrast it with the emphasis on impersonally-framed *theory virtues* we earlier saw in Bevir’s approach.

Our final example of a dialectical conception of objectivity is Lorraine Daston and Peter Galison’s recent book *Objectivity* (2007). They argue that concept of scientific objectivity has a history, but that the epistemic norms that have informed scientific practice can be historicized without leading to relativism. Only lack of historical awareness among philosophers of science allows us to overlook how shifts transitions between explicit decision criteria and expert judgment have occurred in the past. The authors’ historical and comparative approach to a study of scientific atlases reveals more specifically a slow negotiation and transition between what they claim are at least five distinct scientific “ways of seeing”, five competing conceptions of objectivity: truth-to-nature, mechanical objectivity, structural objectivity, trained judgment, and presentation. Part of the authors’ thesis is that alternative conceptions of objectivity abound, but that neither logic nor history can make the choice among different conceptions of objectivity together with their supporting epistemic virtues. Still, they hold, the choice exists, so that it’s important to see what it hinges upon. While the authors do not argue explicitly for any one of the

main models that they see exemplified in science, the dialectical overtones in their treatment of objectivity emerge from their descriptions of the pairing of each epistemic virtue with a particular, value-charged conception of the “scientific self” of objectivity. Each recognized virtue is one that compensates for or helps combat a cognitive or motivational “danger” for this particular scientific self—one that this self is thought to be especially susceptible to. The rise of the ideal of objectivity thus goes hand-in-hand with the acknowledgment of particular epistemic virtues, virtues that are on the one hand practiced in order to know the world, but which on closer examination “turn out to be literal, not metaphorical, virtues” in the sense that forms of scientific self and epistemic strategies are mutually supportive.¹²

Let us summarize before moving on. Bevir is focused on history of ideas, Levisohn on history education, Paul on the “doings” of historians, and Daston and Galison on a genealogy of epistemic virtues concepts through comparative case studies. Yet each combines historicist assumptions with appeal to virtue epistemology, and all four share key aspects of the dialectical account of disciplinary objectivity that Megill initially described for us. Paul, along with Daston and Galison, are the most concerned to show that what we deem to be epistemic virtues change over time—that objectivity has a history, and that specific epistemic virtues, whether of the personal or the theory virtue type, are valued more at one time than at another. Bevir and Levisohn, along with others including Frank Ankersmit¹³ develop “objectivity through

¹² L. Daston & P. Galison, *Objectivity* (New York: Zone Books, 2007), 39.

¹³ The dialectical model is recognized by Frank Ankersmit when he writes that “I fully agree with

comparison” of competing extant theories, while Daston and Galison’s form of comparison engages distinct images of the scientific self reflected over broad spans in the history of science. But again, all of these authors assert view the thick concepts upon which they focus as *enabling* objectivity, and appeal to them as helping historicists to avoid relativism. Each in this sense also develops a further point that Megill described as a basic feature of a dialectical objectivity: A central concern with *epistemological* (including meta-methodological and axiological) questions of how objects of investigation are produced and how research programs are criticized and compared.

Our four authors have each expressed what Paul calls historicist awareness of how intellectual virtues are shaped by their historical contexts. But far from painting them with a single brush, I now want to elaborate upon certain difference between some of them. So the next section asks the very odd but I hope thought-provoking question why Paul (and Levisohn) appeals primarily to desirable *personal virtues* of the writers of biographies and histories as providing the forward-looking guidance and backwards-looking criteria of choice or evaluation, while Bevir’s instead appeals primarily to impersonally-framed *theory virtues* as the shared

[Bevir’s] comparativist view of historical truth as expounded in the section of Chapter 2 on 'objectivity through comparison': historical truth is not a matter of a correspondence between historical writing on the one hand and past reality on the other, but requires us to compare a set of rival representation of the past with *each other* and of seeing, next, which is the most satisfactory one of the set”. “In my book on narrative logic of some twenty years ago I came to exactly the same conclusion - and on the basis of much the same argument as Bevir's (Ankersmit 1983: pp. 235 – 47).

desiderata: “criteria of accuracy, comprehensiveness, consistency, progressiveness, fruitfulness, and openness”. Both authors engage central issues of historiographic method, yet they intriguingly do so through appealing to quite distinct versions of virtue epistemology. Why is this? It is a question that invites us to frame a *diagnostic thesis* about what makes these different appeals attractive to each author.

3. Fault Lines: A Diagnostic Thesis

The difference between Bevir on the one hand and Paul and Levisohn on the other appears to be explainable by differences in how they view objectivity in their fields. But I do not need or intend to pick a side in the debate within historiography between emulationist, narrativist, interpretivist, tropological, etc. conceptions of methodology. My purpose again is diagnostic, and the *diagnostic thesis* holds that the different ways Bevir and Paul integrate epistemic virtues (and virtue epistemology more generally), into their respective accounts are reflective of divergent conceptions *they* hold of the objectivity that history-writing can aspire to.

Bevir appeals to *theory virtues* as “clearly defined criteria” helping us compare webs of theories. “Objective knowledge”, Bevir writes, “arises from our exercising the virtue of intellectual honesty within a practice of comparing rival webs of theories. If we disagree about the relative merits of different views, we should draw back from the point of disagreement until we can agree upon a platform from which to compare them, where the platform at which we

arrive will consist of agreed facts, standards of evidence, and ways of reasoning”.¹⁴ While the ability to “draw back” clearly calls upon praiseworthy self-distancing habits of the inquirer and ultimately on their intellectual honesty, it is the agreed *theory virtues* that the actual comparison *of theories* proceeds upon.

By contrast, this layer of criteria, the *theory virtues*, goes virtually unmentioned by Paul and Levisohn, two narrativists who I suspect would find Bevir’s appeal to it superfluous or unworkable in the discipline of historiography. On the other hand, Paul’s and Levisohn’s apparent collapse of the distinction between theory virtues and personal virtues might be thought to invite relativism, as some forms of strong historicism do. Paul’s position as we’ll later see is influenced by White’s “tropological” view of the nature of historical narration. Whether or not that is so, Levisohn still more explicitly claims that success in the negotiation of narratives “must necessarily be a quality of the activity of historical inquiry rather than the quality of the historiographical product”.¹⁵

As we develop these focal contrasts, let us stipulate, in order to avoid an unnecessarily demanding or restrictive account that impersonally-framed *theory virtues*, and inquiry-directed *personal virtues* and their associated motivations, will be taken sub-species of epistemic virtues. For the connection between theory virtues and virtue epistemology is not merely ornamental. Both are directly concerned with ampliative (non-deductive) reasoning in the sciences.

¹⁴ Bevir, *The Logic of the History of Ideas*, 153.

¹⁵ Levisohn, “Negotiating Narratives”, 17.

Moreover, application of theory virtues to choose among competitors involves weighing these theory virtues against one another, and thereby calls upon the judgment or what Pierre Duhem would call the *bon sens* of the scientist. Hence a condition of character is clearly apparent even where the explicit appeal is only to impersonally-framed theory virtues. Indeed both the appeal to theory virtues and the appeal to *bon sens* remind us that the scientist qua scientist makes value judgments.

But differences remain. *Theory virtues*—accuracy, comprehensiveness, consistency, progressiveness, fruitfulness, etc— are impersonally described, and seem clearly to be “cognitive” values or virtues, as distinct from ethical concerns.¹⁶ The *personal* virtues by contrast describe real or ideal excellences of inquirers, not of theories or hypotheses *per se*. Perhaps for this very reason, they are less purely intellectual, and indeed those who emphasize their role in inquiry, from Pierre Duhem to Daston and Galison, and to Levisohn and Paul, often want to *insist* that they are or include character traits in the full Aristotelian sense; they reflect norms internalized by appeal to ethical values and so cross boundaries between epistemic and ethical evaluation.

To look more closely, there is good reason to think that strong narrativists will find most appealing the character epistemologies which focus on *personal* intellectual virtues, and tend to

¹⁶ This does not mean to imply they are ‘purely epistemic.’ Pragmatism would be wary of that notion. Some cognitive values like “simplicity” are often seen to be theory virtues, yet as much aesthetic and pragmatic as an indicator of truth.

allow or even to insist upon a *blurring* of the distinction between the intellectual and ethical dispositions manifested in good or praiseworthy research. In other papers I have called this *phronomic* character epistemology (after the Aristotelian *phronimos* or person of practical wisdom). What I think of as an extreme example of it is the character epistemology of Lynn Holt in *Apprehension: Reason in the Absence of Rules*, a form of virtue epistemology in which the apprehensive reasoning and sensitivities of experts in particular domains is explicitly claimed to be *constitutive* of knowledge in their field. Holt's calls this his "Apprehensionist" virtue epistemology, and develops its theme of reason in the absence of rules in sharp contrast with "Methodism" about reason and epistemic status. Highlighting the change in the direction of analysis that has for better or worse come to be associated with character epistemology, he argues that "To make a discovery is to be justified, precisely *because* the discovery flows from virtuous activity".¹⁷

Now I do not mean to suppose that Levisohn or Paul are committed to any so radical version of character epistemology, but I do hope this example shows that what scientific and historiographic objectivity *mean* may already be in play when, as desiderata of theory choice, authors appeal to those *personally* or *impersonally*- framed thick concepts that we here designate by the common term, epistemic virtue. Moreover, if I interpret them correctly, Paul and Levisohn

¹⁷ "In an apprehensive account of reason, the problem of conceiving how scientific discovery could be rational is not the problem of supplying a logic or methodology of discovery. It is rather the problem of determining the appropriate intellectual virtue". L. Holt, *Apprehension: Reason in the Absence of Rules* (Farnham, UK: Ashgate, 2002), 88.

do indeed hold that the *personal* virtues of exemplary historians are not only instrumentally valuable to their research practices, but partly *constitutive* of historiographic objectivity (knowledge of the past) and of the positive epistemic status of historical explanations.

Now I want to argue that the viability of the distinction between personal and theory virtues may as a general rule wane or sharpen as we move from one field of research to another, depending on how prevalent are worries about underdetermination. Studying this question can help us make better sense of divisions among scientific fields. To approach it we engage a recent debate among philosophers of science over Pierre Duhem's account of *bon sens* (personal virtues of good sense) of the scientist as ampliative desiderata of theory choice in his own field of physics.

4. Duhemian *Bon Sens* and Differences between Disciplines

Considerations stemming from underdetermination and holism support our claim that moderate historicism require complementation with agent rather than merely belief-focused epistemology. It also helps us see why different authors appeal to distinct *versions* of virtue epistemology.

In David Stump's paper "Pierre Duhem's Virtue Epistemology", the author takes Duhem (not-mistakenly) to recognize an important problem of theory choice, one that would later take on the name of the underdetermination problem and play a role in the downfall of the account of metascience advocated by logical empiricists. He sees Duhem resolving underdetermination worries by appealing to a cluster of virtues he calls *bon sens*, or 'good sense.' Stump writes, "Duhem's concept of 'good sense' is central to his philosophy of science,

given that it is what allows scientists to decide between competing theories. Scientists must use good sense and have intellectual and moral virtues in order to be neutral arbiters of scientific theories, especially when choosing between empirically adequate theories”.¹⁸ In Duhem's account of scientific theory choice, there *is* openness, since strict rules and crucial experiments rarely apply, but there is also objectivity. The source of this objectivity is the epistemic agent—the scientist who acts as an impartial judge and makes a final decision: As Stump describes it, “holism threatens to make testing impossible, yet Duhem believes that scientific consensus will emerge. While the pure logic of the testing situation leaves theory choice open, good sense does not”.¹⁹ Stump makes the strong claim that “Duhem maintains that the objectivity of the theory selection rests with the scientist as an epistemic agent, not with nature”. So Stump’s neo-Duhemian philosophy of science seems exemplary of Apprehensionist (or Phronomic) character epistemology.²⁰ The choices made by the virtuous scientist working under conditions of

¹⁸ D. Stump, “Pierre Duhem’s Virtue Epistemology”, *Studies in History and Philosophy of Science*, 38, 149-159, 149-150. Duhem’s position seems close to many readers to conventionalism, and to the view that there is simply no cognitive way to decide between empirically equivalent theories. Stump argues that despite the fact that Duhem is sometimes read as a conventionalist, closer examination reveals adequate support for the view that a scientist with good sense will choose between competing theories. Consensus does emerge, and not for purely conventional reasons.

¹⁹ Stump, “Pierre Duhem’s Virtue Epistemology”, 154, emphasis added.

²⁰ The personal virtues in question—impartiality, sobriety, intellectual courage, humility, rectitude, and probity—Stump thinks (mirroring own thinking of the virtues of *bon sens*) are partly moral and well as

underdetermination *confers* genuine though fallibilistic epistemic standing upon his or her actual choice. This position, however, seems to stray far from naturalism.²¹ Stump's critic, Milena Ivanova is intent on showing that treating Duhem as a proto-character epistemologist is a mistake; she counters with passage by Duhem suggesting that the role of *bon sens* regards only theory pursuit and that it is only later revealed facts that confers epistemic status on the chosen theory. This better satisfies Ivanova's own empiricist views, on which only testing and empirical fit decides the epistemic standing of a theory. Good sense "can be descriptive" of a basis of choice, she thinks, "but it cannot provide us with a solution when faced with the problem of theory choice"²²; some (later-found) evidential support *alone* confers epistemic status on a belief or theory. For her, then, *neither* form of ampliative desiderata, ampliative *theory virtues* (as

intellectual. Responsibilist epistemologists generally think that focusing on epistemic agency rather than merely beliefs blurs the distinction between epistemic and intellectual evaluation.

²¹ It is of course controversial that some share of the epistemic value of a scientific *theory* should be located in the traits of scientists themselves; this seems to reverse the usual direction of analysis. But many have thought this is precisely what a virtue epistemology *should* do. Abrol Fairweather calls this the "direction of analysis criterion", noting that taking the agent rather than the belief as the 'seat of justification' has been indicative of much responsibilist (if not also reliabilist) virtue epistemology. Fairweather, "The Epistemic Value of Good Sense", *Studies in the History and Philosophy of Science, Part A*, Vol. 43,1 (2012), 139-146.

²² M. Ivanova, "Pierre Duhem's God Sense as a Guide to Theory Choice", *Studies in History and Philosophy of Science Part A* 41(1):58-64, 63.

separated out from empirical adequacy) nor *personal virtues* pertain to theory confirmation, but only to psychology and pursuit.

A third author who enters this debate, Abrol Fairweather in “The Epistemic Value of Good Sense” (2012), re-introduces the distinction between theory virtues and personal virtues that seems missing in the exchange between Stump and Ivanova. Also useful for our own purposes, he ties it carefully to an overlapping distinction between contexts of *UD inquiry* and contexts of *non-UD inquiry*. For our purposes we should understand contexts of *UD inquiry* to refer to a local instances where theory choice is underdetermined even by a shared methodological standards or a shared list of theory virtues. This makes sense of Fairweather’s claim that in circumstances of *UD inquiry* the scientist’s “methodological cognitive character is not a constitutive element”.²³ We need not engage here the broader debate over how rare or common-place *UD inquiry* actually is. Fairweather’s claim is that in *UD inquiry* it’s not at all clear that appeals to the methodological or even the personal character of the researcher is not also contributory to the epistemic status accorded to a theory. Agreeing with this point, like Fairweather I think one can take a *via media* between Stump’s and Ivanova’s “unmixed”

²³ Although a scientist’s methodological character is developed through *non-UD inquiry*, he sees it as having sensitivities to what David Henderson terms *morphological content*—the need to respond to global features of an agent’s cognitive system to avoid problems associated with otherwise unmanageable computational complexity. “[R]easoning with theory virtues will involve global morphological features of theories, cognitive dispositions sensitive to these morphological features and non-rule-governed cognitive transitions” (Fairweather, “The Epistemic Value of Good Sense”, 141).

responsibilist and reliabilist accounts of epistemic normativity. Fairweather argues that, “The virtues of good sense do not have a constitutive role in generating the epistemic standing of theories in non-UD inquiry. Method and evidence reign when they can, but epistemic normativity becomes aretaic in UD inquiry with the express purpose of resolving underdetermination. The success condition for the relevant virtue or ability is simply to break the empirical stalemate in an appropriate way, where good sense supplies the relevant sense of appropriateness....²⁴

With this interesting thesis that *epistemic normativity becomes aretaic in UD inquiry*, and the further claim that the virtue theoretic reading provides continuity between these two contexts of inquiry, providing needed constraints on admissible resolutions of underdetermination, we have come as far as we need to. Reducing desiderata of theory choice to *personal* virtues, Fairweather rightly worries, invites the unmotivated introduction of radically new epistemic values or virtues. But at the other extreme, if only evidence can “determine” theory choice as Ivanova thinks then there should be no need for good sense at all; we seem to be ignoring underdetermination problems because they don’t fit with a preconceived model of rationality, rather than engaging with how such problems are actually resolved in scientific practice.²⁵

²⁴ Fairweather, “The Epistemic Value of Good Sense”, 141.

²⁵ John Zammito finds that, “Duhem’s concreteness ties in profoundly with recent efforts to get at science as ‘practice’”; when extricated from Quine’s views, the lessons of Duhem’s moderate holism are easily relatable to Zammito’s ‘moderate historicist methodology.’ *A Fine Derangement of Epistemes: Post-positivism in the Study of Science from Quine to Latour* (Chicago, IL: University of Chicago Press, 2004),

The lesson for us, it seems to me, is not Ivanova's, that only evidential factors can confer epistemic status upon a theory or theory-choice. Rather it is that even moderate historicism about the epistemic virtues at work in situations of underdetermination throws into question the ideals of epistemic purity. The ethical connotation of these virtues is only a further mark of this historical conditioning.²⁶ Whether one accepts that virtue concepts play a constitutive role in generating the epistemic standing of theories depends upon one's particular field and whether or not it is regularly beset by worries about underdetermination. Fairweather argues cogently, I think, that "the virtues of good sense do not have a constitutive role in generating the epistemic standing of theories in non-UD inquiry" but that the case is not clear in respect to UD inquiry, where epistemic normativity (aims of justification, rationality, truth and understanding) is in an important sense *aretaic*.

My thesis with respect to Levisohn and Paul's emphasis on *character* virtues over *theory* virtues should now also be clear: Both start with such a narrative conception of historiography and this leads them to develop the specific form of virtue epistemology that complements that

22, 228.

²⁶ One way in which the impurities are present, according to social and feminist epistemologist Heidi Grasswick, is in the manner in which "attention to issues of epistemic responsibility inevitably blurs the boundaries of ethics and epistemology". H. Grasswick, "The Impurities of Epistemic Responsibility: Developing a Practice-oriented Epistemology" in H. Nelson and R. Fiore (eds.), *Recognition, Responsibility and Rights: Feminist Ethics and Social Theory* (Lanham, MD: Rowman and Littlefield, 2003), 101.

conception of their field. This will tend to see underdetermination of theory-choice by methodological norms common-place in their field, and in such an interpretive field the character virtues are appealed to as desideratum of the quality of professional works or ‘doings.’

An additional influence over Paul that makes an Apprehensionist character epistemology appealing is Hayden White’s tropological conception of historiography. White argued that there are very good reasons why history cannot be rendered a science without losing its identity as history. These reasons have directly to do with rhetorical strategizing and with the impossibility of excising the “imaginative element” from historical writing, as it might be excised in some other types of academic writing. Historical writing is “more tropological than logical in kind” (from rhetorical “tropes”), there being “an ineluctable poetic-rhetorical component” necessary to the construction of its narratives.²⁷ The historian, as perhaps others do not, needs to select or “choose” the techniques of explanation and interpretation, and the choice is made to actively suit rhetorical purposes: hence the “tropological” character of historical narration.²⁸ Originating from

²⁷ H. White, “An Old Question Raised Again: Is Historiography Art or Science?” *Rethinking History* 4:3 (2000): 391-406, 391.

²⁸ White writes, “Thus, a tropological approach to the study of historical discourses seems imminently justified if not required by the differences between historical and scientific discourses, on the one side, and the similarities between historical and literary writing, on the other” (393-394). But one qualification is that neither these writers nor White himself need to be seen as *prescribing* rhetorically-strategized history. Ankersmit points out that White’s “tropological” view is primarily diagnostic or descriptive, trying to make historians and philosophers alike more aware of the stumbling blocks facing would-be

what I think is a conception of historiography strongly influenced by White, Paul's favoring of personal virtues and relative neglect of the theory virtues Bevir appeals to is easily understandable.

But now that our *diagnostic thesis* has been described and supported, we must ask what support it in turn can add to the development of our *constructive thesis*. I would draw three main lessons from it. First is the "local" and contextual nature of underdetermination worries. It is tempting to over-generalize by thinking either that the theory virtue/personal virtue distinction tracks differences between scientific and non-scientific research, or that epistemic normativity "becoming aretaic" is as true in the sciences as in non-scientific fields. Sociologists of knowledge have been sometimes promoted such overgeneralizations in countering those of positivist metascience.²⁹ By contrast with both, underdetermination worries as the *diagnostic thesis* takes them do not necessarily track the distinction between hard and soft science, or between nomothetic and ideographic disciplines: Duhem found *UD inquiry* and its attendant

scientizers of the field of history. If history-writing is more akin to journalism, then noticing rhetorical dimensions is a wake-up call.

²⁹ Porter issues a useful counterpoint, however: "[Trevor] Pinch implies that this is universal, that all of science depends on judgments of character and skill. No doubt he is right. But rarely is informal, personal knowledge so dominant as among the gentlemanly geologists and high-energy physicists. There are ways of making knowledge more rigid, standardized, and objective, and these have gone a long way to reduce the need for personal trust". T. Porter in *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton University Press, 1995), 223.

worries about desiderata to be common-place in physics, often considered the epitome of hard science. Our thesis thus lends support to independent arguments such as those of Thomas Nickles “that methodology no longer will be a single, unitary subject but will, at the more interesting levels of detail, breakdown into domain and context specific rules, practices, and advice”.³⁰

The second way that our *diagnostic thesis* might serve our broader development of synergies between historicism and character epistemologies is simply by supporting the dialectical approach to objectivity. If there is any strength in its ability to expose and articulate “fault-lines” within historiography, it becomes an invitation to talks about those differences in conceptions of the field, just as on a broader scale it introduces a new way of mediating the old debate about the relationship between methodology in the physical and social sciences. The third way that it might serve is by highlighting for us the essential roles played by thick concepts both prospectively and retrospectively—both as “desiderata” and “exemplars” for the practitioner, and at times as “criteria” in the ampliative kinds of inferences that theory-confirmation often calls for.

5. Some Advantages of Character Epistemologies

Character epistemologies arguably have distinct advantages over their reliabilist and evidentialist rivals that are of direct relevance to the concerns of philosophers of history. They conceive

³⁰ T. Nickles, “Good Science as Bad History”, 126.

responsibility, a diachronic or longitudinal concept, to be an epistemically central concern, and so have the advantage of being consonant with contemporary social epistemology, inviting both genealogies and normative reconstructions of epistemic concepts like objectivity, rationality, responsibility, etc.³¹

Are character epistemologies also better able to explain the intellectual creditworthiness of scientists of bygone eras? “Newton was probably the greatest scientist who ever lived (the one whose intellectual acts merited the greatest degree of praise); still, he was wrong wholesale—as we now know”.³² Mainstream epistemologies, externalist and internalist, have a surprisingly difficulty even squaring with our intuitions about the creditworthiness of the work past scientists whose theories or methods are now overstepped. Let us briefly consider the reasons why, and then look at concerns with how we ascribing to them and to others praiseworthy intellectual motivations and habits of inquiry. This will lead to further connections between thick concepts and historical explanation.

On reliabilist epistemologies, which focus on knowledge attributions, if a scientist’s work

³¹ Stephen Napier writes that, “One theoretical fall out of responsibilism is that it marks a shift away from analyzing epistemic concepts (e.g. knowledge) in terms of other epistemic concepts (e.g., justification) to analyzing epistemic concepts with reference to kinds of human *activity*. . . Much of analytic epistemology focuses on epistemic *concepts*, whereas the responsibilist focus is on epistemic *activity*”. S. Napier, *Virtue Epistemology: Motivation and Knowledge* (London: Continuum, 2008), 144.

³² R. Lockie, “Problems for Virtue Theories in Epistemology”, *Philosophical Studies* 138:2 (2008), 169 - 191, 174.

on x did not result in their believing truly that x, there is apparently no “success” in the sense of a positive epistemic standing to credit them with. Reliability is taken as a truth-linked success concept, and with respect to correspondence-truth there are no gradations of success; it is all or nothing and the beliefs of scientists whose theories have been displaced seem simply to have been collections of beliefs unreliably produced. This is not to say that objective success is necessary for *rationality* on the externalist view; it is not, but neither is this approach very interested in questions of rationality and responsibility. While both may be seen as contributing to agent reliability, both are generally treated as superfluous for the kind of epistemic appraisal in which they are primarily interested, and the only kind they take to be directly connected with the central issue in the field of epistemology, the analysis of knowledge.³³ Insofar as reliabilists have been dragged by responsibilists to include “understanding” and not just knowledge as a valuable epistemic aim, reliabilism is only able to treat understanding as knowledge or true belief about causes. Responsibilists argue that this “factive” conception of understanding is unduly restrictive. “It neither reflects our practices in ascribing understanding nor does justice to contemporary science”.³⁴ Given especially what Robert Brandom calls the ‘naturalistic temptation’ to think that (naturalized) epistemology can do without “good reasons” explanations

³³ Lorraine Code writes that “[A] ‘reliable’ knower could simply be an accurate, and relatively passive, recorder of experience. ...An evaluation of human knowledge-seeking in terms of responsibility is instructive precisely because of the active, creative nature of that endeavour (L. Code, *Epistemic Responsibility*, Brown University Press, 1987, p. 51).

³⁴ Catherine Elgin, “Understanding and the Facts” (*Philosophical Studies* 132(1) (2007): 33-42).

by supplanting concerns with rationality with wholly causal ones, the concepts of rationality and responsibility play little role in the reliabilist's approach. Reliabilist theories have trouble explaining a) the place of theoretical understanding in scientific reasoning and in human cognitive economy more generally, b) how theoretical models and scientific instruments "extend" cognition, c) how to understand agent reliability when dealing with cases of misleading evidence, and even d) why we should value acquiring *interesting* true beliefs over simply *more* true beliefs.

Epistemological internalism would initially appear to be in a better position to support the common-sense ascriptions of creditworthiness (and intellectual virtue) to Isaac Newton or other noted scientists of yore. Internalists focus on propositional or evidential justification, and could point out how our past masters were evidentially justified by the tests they ran and the evidential good reasons they had available to them. Evidential justification can be had in many cases even where the belief is not true, and Newton might be intellectually praiseworthy in this sense. But on closer inspection, the leading internalist theory, evidentialism, isn't able to account for a full range of discovery heuristics and intellectual virtues valued in scientific practice. Take for instance a scientist's tenacity in holding onto budding research programs. Such newbie programs Imre Lakatos famously described as 'born refuted,' since they as yet enjoy no advantage in empirical adequacy over extant competitors, and typically start out immersed in a 'sea of anomalies' that only subsides over time as they build a track record of experimental and theoretical success. Inquiry is by definition diachronic or extended over time; but the aspect of rationality that leading evidentialists are exclusively interested in is wholly synchronic. One is a

reasonable or rational epistemic agent at time T1 if and only if one is proportioning the strength of belief that x to the total evidence supporting x at that time-slice.³⁵ Hence no evidentialist could endorse the reasonableness of accepting a theory that doesn't have a decisive advantage in empirical adequacy over its competitors (and budding research programs seldom do). One who accepted it or pursued it on *bon sens*, but *without* a preponderance of evidence, would appear synchronically irrational, their degree of belief out-stepping their current evidence.³⁶ Evidentialist epistemologies would appear to surrender what McMullin calls the “diachronic dividend”, and to render paradigm instances of scientific discovery and of “tenacity” epistemically blameworthy behavior.

6. Historicism, Naturalism, and the Functions of Thick Concepts

³⁵ The distinction between synchronically and diachronically-focused epistemology is closely entwined with the distinction between an epistemology being belief-focused and being agent-focused, a debate the virtue epistemologists have especially been concerned with.

³⁶ I have elsewhere critiqued the reductive claim by leading evidentialist philosophers that only the synchronic mental event of “fit” between one’s beliefs and one’s available evidence is a source of epistemic value. An agent’s conduct in inquiry—how they acquire what they or their community consider evidence—is often an issue of legitimate epistemological concern, and not always ‘nothing but’ a pragmatic or moral concern. See G. Axtell, “Recovering Responsibility” (*Logos and Episteme*, II, 3 (2011): 429-454); also “From Internalist Evidentialism to Virtue Responsibility”, in T. Dougherty (ed.), *Evidentialism and its Discontents*, (Oxford University Press, 2011).

Herman Paul writes that virtue theory “encourages thick description and careful contextualization, so as to take into account the peculiarities of practices and epistemic cultures in which historians find themselves working”.³⁷ Let us develop these points through the work of Bernard Williams and Thomas Haskell. For Williams, thick characterological and affective concepts are Janus-faced, having both descriptive and evaluative functions. “Normativity and naturalism cannot be very sharply divided because the primary element in all judgments of responsibility, moral or intellectual, is causation...The other issues can arise only in relation to the fact that some agent is the cause of what has come about. Without this, there is not concept of responsibility at all”.³⁸ According to Williams, “these four elements, cause, intention, state, and response...are the basic elements of any conception of responsibility”.³⁹ Responsibility for the virtue theorists then is primarily a diachronic, a historical concept, and not a synchronic one.⁴⁰

³⁷ Paul, “Performing History”, 15.

³⁸ B. Williams, *Shame and Necessity* (Berkeley: University of California Press, 1993), 56.

³⁹ Williams, *Shame and Necessity*, 55.

⁴⁰ “Certain phenomena or notions are historical, and, in contrast, certain phenomena are current time-slice notions. A current time-slice notion is something that does not depend in a crucial way on its history being a certain way rather than another. The current time-slice notions supervene on snapshot properties – properties that one could in principle take a snapshot of at a given time....So there are current, time slice notions and historical notions. My claim is the moral responsibility is an historical notion”. John Martin Fischer, “Responsibility, History, and Manipulation”, *The Journal of Ethics*, Vol. 4(4), 385-391, 386.

Now explanations and what Paul calls thick descriptions, especially those attributing intentions and motivations to agents, are selective and value-charged. The explanatory salience of any explanatory scheme depends upon its fit with facts, but also upon the kinds of interests in explanation we have. One might say then that adequacy of an explanatory scheme must be judged in terms both of naturalistic and normative concerns. Starting with our naturalistic concerns, it is readily apparent that historians, social scientists, and philosophers often invoke character traits in the course of explaining or interpreting the reasons for actions and decisions. A concern with rational agency is typically expressed through a common-sense or folk-psychological framework of intentions, beliefs, desires, character-traits, etc. This framework of thick description is fraught with difficulties, but it allows encourages empathetic consideration of what people might have thought and felt under past circumstances. But let's look closer at how historians utilize character-trait ascriptions when writing about historical agents, and what concerns might arise with it.

Thomas Haskell argues in *Objectivity Is Not Neutrality* that “Historians are not shy about assigning responsibility or imputing the causal status upon which responsibility rests” nor should they be.⁴¹ There is a substantial role of causal reasoning in history as in everyday life; historians can appropriately pass judgments of praise, blame, responsibility, liability, deliberateness, etc. Haskell like Williams asserts that all such judgments “ride piggyback on perceptions of cause

⁴¹ Haskell, *Objectivity Is Not Neutrality*, 12.

and effect”.⁴² But here he also points out lies a daunting set of problems for working historians because—or so Haskell argues—practicing historians are often deeply confused about the role of causal reasoning in the writing of history. Most notably he finds that their penchant for attributing responsibility to people for particular actions and events often run in tension with their own skepticism about the language of causes. This skepticism in turn is in no small degree the result of “polarizing dynamics of the contest between narrativists and Hempelians”. Heated debates over historiographic methods have led many working historians to neglect the interest-laden character of intentional explanations, and unwisely to abdicate all talk of causes to the Hempelian “nomological-deductive” model of causation.

Haskell is highly critical of the assumptions many historians and philosophers of history make, “that narration and causation are polar opposites” and that “in spite of all appearances to the contrary, causal reasoning plays only a peripheral role in history”. These assumptions feed further polarization over methodology, and encourage the ill-considered stance that “what we want from history is not explanation, but something entirely different, ‘understanding.’”⁴³ To counter-act what he characterizes as a maladaptive re-positioning of history and historiographical methods, Haskell argues that not all causal inference is characterized by the Hempelian notion of subsumption of the particular event under a nomological or law-like regularity. The ‘unity of science’ ideal that prompted Hempel’s insistence that history could be no exception to the search

⁴² Haskell, *Objectivity Is Not Neutrality*, 11.

⁴³ Haskell, *Objectivity Is Not Neutrality*, 13-14 & 17.

for general laws disintegrates, but not because of historiography's lack of need of the concept of causation. It disintegrates rather because of the plurality of modes of causal inference that post-positivists have identified. This plurality is a further sign of how *interest-dependent* the notion of explanatory salience is. I think we should agree with Haskell firstly that historians, in tracking change, are employing explanatory schemes; and secondly, that the "narration" needed to link historical happenings into ordered and meaningful sequences is not really an exception to, but only "an especially supple form" of causal reasoning.

These arguments do not deter Haskell from recognizing that historiographic projects are quite diverse, and have an equally substantial rhetorical dimension. Histories, biographies, etc. are written with particular audiences and effective persuasive strategies in mind. Some are "gray, meticulous, and patiently documentary", but others reflect quite different literary intentions. The rhetorical triangle of *Pathos-Ethos-Logos* and the rhetorical posture of the person doing the explaining are ever-present concerns. So if we think about problems with character trait-ascriptions that historians should avoid, one is the charge of "fundamental attribution error". Not only virtue ethics but also virtue epistemology has been targeted as empirically inadequate by situationist social psychologists who argue that morally or epistemologically irrelevant situational factors and the agent's temporary mood are by-and-large better explainers than are deep-seated traits of moral or intellectual character. Should historians on this account avoid attributing any robust or global traits to particular persons? I think not. But natural scientific study should qualify the use of trait-ascriptions in certain ways. Awareness of the *heuristic of leveling and sharpening* seems important. People leave out what seems unimportant or

uninteresting and sharpen or highlight what seems interesting or explanatorily salient to them, and this is a known source of bias and error; any extended testimony-chain game play in a classroom easily reveals this. Do historians like other people ‘leveling out’ what might have been important situational factors for an agent? Do they ‘sharpen’ what is of interest to them by over-attributing robust character traits to people who are key agents of historical change, and by exaggerating personal responsibility? And do our biographies and histories sometimes reflect the further common bias of attributing personal traits in an *asymmetrical* fashion, such that the ethical failures of those we’re well-disposed towards are treated as due to situational happenstance, while the failures of those we’re ill-disposed towards are more often treated as due to their own personal intellectual or moral flaws or vices?

While it is useful to reflect on lessons that the social scientific studies of biases and heuristics may have for the ways we employ character-trait attributions, the wholesale skepticism about stable personality and character traits that some situationists espouse should be rejected⁴⁴; situationism is based upon a radical re-interpretation of long-standing social-psychological studies. Neither character-traits nor responsibility for actions are things that have or can be empirically discredited, and historians needn’t shy away from them on the basis of situationist theory. Moreover, explanatory schemes that attribute responsibility (in one of Williams’ senses)

⁴⁴ For a fuller discussion see also my “Virtue-focused Epistemologies, Defended: A Reply to Doris and Alfano” a typescript at *JanusBlog: The virtue theory discussion forum*, <http://janusblog.squarespace.com>.

to an individual for an action they perform arguably remains crucial to our ability to confer meaning and *intelligibility* upon events. An historical narrative that explains important social change a being primarily due just to happenstance, including the mood the person was in, etc., would not appear to offer a means of conferring much intelligibility upon past events.

Let us now consider the normative face of virtue theory by looking at the evaluative aspects of thick characterological and affective concepts. These concepts have a certain “valence” that marks them as value-charged concepts; when we attribute a virtue or vice to a person, we are offering a judgment, an evaluation. Thus we might worry that the trait is being applied moralistically or anachronistically. This is especially worrisome when the attributor also takes that trait to be a salient explainer of actions or events within an historical narrative. But this is relatively easy to avoid if one is careful, and is certainly no strike against the value of thick concepts generally, since thin ones (right/wrong; good/bad) are subject to the same criticisms. Virtue theory supports the Janus-faced, descriptive and normative project Williams embarks upon by fostering a “thickening” of the language of normative concepts mainstream reliabilist and internalist epistemologies focus upon (justification, warrant, knowledge, etc.).⁴⁵ Character epistemologists have called for a ‘thickening’ of epistemology, serving to bring mainstream

⁴⁵ On recent calls for the “thickening” of epistemology, see the papers in the 2008 *Philosophical Papers* edition, *Epistemology through Thick and Thin*, 37(3). These include Catherine Elgin, “Trustworthiness”, 371-387; Guy Axtell and Adam Carter, “Just the Right Thickness”, 413-434; and Alan Thomas, “The Genealogy of Epistemic Virtue Concepts”, 345-369. Thomas argues explicitly that “genealogy is an important contribution to the project of virtue epistemology” (2008, 362).

approaches into more direct contact with ‘fringe’ movements of social and feminist epistemology. Character epistemologist Catherine Elgin comments,

If Williams is right about the relation of a thick concept to its thin descriptive precursor, then thick concepts are not a mere convenience. Without such normatively loaded concepts, we could not partition the world as we do. If epistemic concepts are thick, we should expect them to display the same pattern. They should be anchored in, but not supervene on, a descriptive core. They should mark out extensions that we have no evaluatively neutral way to demarcate.⁴⁶

We have briefly looked at naturalistic and normative concerns with character-trait ascriptions, whether by a historian or by someone else. But what special naturalistic and normative concerns with thick concepts might philosophers themselves have? Consider Williams’ own efforts to provide a “genealogy” of central epistemic concepts. Williams was likely the first to develop genealogy along virtue-theoretic lines, so this can also inform us further about synergies between historicism and virtue theory. In *Truth and Truthfulness*, his last major book, Williams contrasts genealogy with the project of conceptual analysis aimed

⁴⁶ C. Elgin, “Trustworthiness”, 374-375.

at identifying a complete set of necessary and sufficient conditions for the application of a concept. Despite the normative valences of thick concepts and the fictive character of a 'state of nature' narrative, Williams intimates that his social-functional or genealogical accounts of epistemic concepts is "intended to serve the aims of naturalism".⁴⁷ Thick virtue concepts, having both descriptive and evaluative meanings, are crucial to Williams in that they allow him to fulfill without conflation the Janus-faced (normative and naturalistic) aspects of his genealogical account.⁴⁸

⁴⁷ Bernard Williams, *Truth and Truthfulness: An Essay on Genealogy* (Princeton University Press, 2002), 22. My own version of pragmatic naturalism shares with Williams the thought that any apparent tension with naturalism is ameliorated when we move away with preoccupation with reductionism as a hallmark of naturalism. "Questions about naturalism, like questions about individualism in the social sciences, are questions not about reduction but about explanation" (23).

⁴⁸ "A genealogy is a narrative that tries to explain a cultural phenomenon by describing the way in which it came about, or could have come about, or might be imagined to have come out. Some of the narrative will consist of real history, which to some extent must aim to be, as Foucault put it, 'gray, meticulous, and patiently documentary'... However, genealogy is not simply matter of what I have called real history. There is also role for a fictional narrative, and imagined developmental story, which helps explain the concept or value or institutions by showing ways in which it could have come about in the simplified environment containing certain kinds of human interests or capacities, which, relative to the story, are taken as given". B. Williams, *Truth and Truthfulness*, 20-21.

The collaboration between historicism and virtue theory is thus well-displayed both in Williams' and in other philosophers' attempts to provide a genealogy of epistemic virtue concepts. History and virtue theory share a commitment to the value of the diachronic for evaluating both agents and their beliefs. For as Colin Koopman writes,

A developmental perspective is the one thing afforded by history [and genealogy] which other forms of inquiry do not, at least not by themselves, have a handle on. This is why it can sometimes be helpful to contrast historical inquiry with strict or pure conceptions of empirical and theoretical inquiry.... History takes its subject matter as diachronic. It is concerned with development. As such, history offers a perspective which empirical and philosophical approaches cannot mount without explicitly involving themselves in history. This unique perspective is one which faces in both normative and descriptive directions simultaneously.⁴⁹

⁴⁹ C. Koopman, "Bernard Williams on Philosophy's Need for History", *Review of Metaphysics* 64:1, 3-30 (2010a), 17-18. As an inquiry-focused philosophy, the American pragmatist tradition is also more inclined to moderate historicism and to a Janus-faced conception of philosophy's tasks. On the historicism of the classical pragmatists James and Dewey, see Koopman, "Historicism in Pragmatism: Lessons in Historiography and Philosophy", *Metaphilosophy* 41:5, 690-713 (2010b): "In claiming pragmatism as a kind of historicism, my idea is that pragmatism locates each of its central concepts (practice, inquiry, experience, etc.) as transitional processes...Experience is not a presence with its own substantial identity—it is rather wholly constituted by its relations to past and future" (692).

To conclude this fuller development of our *constructive thesis*, our dependence on thick concepts to achieve the tasks we set ourselves — whether as historians or as philosophers of history — indicates again the strong mutual support between historicism and virtue theory that we have argued for. This dependence is also an acknowledgement of the complex entanglement of fact and value involved in historiography and in many other fields of research, and the synergies alleged here grow in importance just to the extent that we acknowledge this collapse of the fact/value dichotomy.⁵⁰

7. Conclusion

If my approach has been on target, then character epistemologies can play a useful role in the meta-methodologies of various scientific fields. But they can play an especially robust role wherever researchers either see their field as tropological, in the sense of White's claim that "historical studies remain both rhetorical and literary"; or more generally where they find comparing competing theories to be routinely underdetermined by agreed facts.

⁵⁰ A fuller development of this last point would lead us to further connections between the present view and with what I above called pragmatic naturalism, which I suggest is a third component to the needed metascientific account along with moderate historicism and inquiry-focused character epistemology. See Hilary Putnam, *The Collapse of the Fact/Value Dichotomy*. (Boston: Harvard University Press, 2002). See also my own paper "Thickies: The Pragmatist Friends of Entanglement" (typescript).

Underdetermination of theory by facts is no guarantee of under-determination of theory choice by methodological norms such as an accepted list of theory virtues (though radical historicists tend to conflate these different senses of the underdetermination problem). But even the milder form construal of the underdetermination problem highlights the centrality of non-deductive or ampliative processes for theory choice, and the thick concepts that function as desiderata in these cases. Where theory-choice is underdetermined even by accepted theory virtues then the evaluation of competing works is not necessarily stymied, but turns to the determinacy-restoring *bon sens* of researchers themselves.

To summarize some of our steps to these conclusions, I have developed our *diagnostic thesis* which is an elaboration of McMullin's point that "Discussion of theory virtues exposes a fault-line in philosophy of science that [separates] very different visions of what the natural sciences are all about". We have used this idea to pursue differences between conceptions of history and historiographic methods, and we have also used it to pursue a more formal way of understanding the relationship between different fields of scientific research. Thus have we found that the question of how to parse the differences between empirical testing, theory virtues, and the personal *bon sens* of researchers themselves admits of no general answer, but depends crucially upon local issues about the relative normality of inquiry being pursued under conditions of underdetermination. Endorsing the *diagnostic thesis* did not force us to take a definitive view about the status of historiography vis-à-vis science. But it helped us to distinguish some extant versions of character epistemology and thus also to recognize the somewhat different ways of restoring

determinacy that they each support. It also helped us to further develop our constructive thesis, the thesis of the advantages of integrating historicism and character epistemology.

We have now also seen that an account that mirrors Bernard Williams' approach to truth and the virtues of truthfulness will treat objectivity not only as an idealized state but also as an agential virtue. It entails, *contra* its standard presentation, a condition of character not recognized in conceptions of objectivity that prescribe an essentially negative relationship to subjectivity, activity, and perspective. But neither should we accept, as the position that a dialectics of objectivity leaves us with, any account that plies upon false dichotomies between method and apprehension, internal and external history of science, or the rational and the social. Indeed, part of the dialectic which philosophy must account *for* and attempt to effectively mediate is just these crude dichotomies.

Methodism (logicism), which draws such false dichotomies in order to prioritize the former items—method, logic, rational reconstructions, etc.—and to preclude the latter from scientific practice, may rightly be accused of objectivism. Some reliabilist virtue epistemologies may be subject to this objection as well, although we have endeavored to show that combining inquiry-focused character epistemology with moderate historicism, and encouraging genealogies of central epistemic values, allows us to sidestep these problems. On the other hand, radical historicisms that exaggerate problems associated with underdetermination or holism may also succumb to the same false dichotomies, just in order to prioritize the latter items — apprehensions, sociological explanations, etc. These radical historicisms have often been accused of flirting with relativism, although we have endeavored to show that character epistemologies

allow us a clear path to historicize epistemic virtues and values in ways that avoid relativism and that indeed helps us explain the intellectual credit still due to past master's whose theories have become obsolete due to the growth of knowledge.

Philosophers of science who have tried to undo the deleterious effects of the aforementioned dichotomies have rightly urged us to disassemble the myth of universally valid methodological and epistemological standards, the rational-social divide, and the distinction between internal and external history of science that rational reconstructionists appeal to.⁵¹ They have rightly suggested that pure versions of logicism and historicism are unequal to the task of elucidating the reasoning involved in theory choice, but that methodism and historicism may still converge, insofar as we are able to construct a philosophy of science that draws both upon history of science and upon a more general logical and epistemological framework. These ideas about metascience beyond the polarity of objectivism and relativism have certainly been raised in the literature, though rarely with much specificity. Our thesis of the advantages of integrating moderate historicism and character epistemology are meant to give these suggestions more

⁵¹ See for instance Helen Longino, *The Fate of Knowledge* (Princeton University Press, 1990) and Richard Burian, "More than a Marriage of Convenience: On the Inextricability of History and Philosophy of Science", *Philosophy of Science*, 44, 1 (1977): 1-42. R. Keat, "Relativism, Value Freedom, and the Sociology of Science", in M. Krausz (ed.) *Relativism: Interpretation and Confrontation* (West Bend: University of Notre Dame Press, 1989). For a further development of a normative naturalistic alternative to the rational reconstructionist projects see my "Bridging a Fault Line: On Underdetermination and the Ampliative Adequacy of Competing Theories", *Synthese* (2012, forthcoming).

philosophic substance, and a clear direction for further development.⁵²

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⁵² Special thanks to the *Society for Philosophy of History*, to Mark Bevir, Herman Paul, and the Journal's editors and staff; also to my co-contributors for insightful comments on an earlier draft.