

# The Varieties of Inquiry

We are inquirers. Most, or at least a large part, of our beliefs and actions follow from our having asked ourselves, and tried to answer, more or less consciously and conscientiously, a question we had previously opened in thought, which can be characterised as having inquired into the question at issue. However, despite its pervasiveness in our intellectual and practical life, inquiry, until very recently, has received very little attention in the philosophical literature. Things are starting to change however with Friedman's contention that normative epistemology should move away from its "doxastic paradigm" according to which epistemic norms are norms of belief and doxastic states only, and take the "zetetic turn" (Friedman 2020) according to which bringing out the norms of inquiry is part and parcel of its business, or with Kelp's claim that we should "take inquiry (or finding out about things) as the starting point for epistemological theorizing" (Kelp 2021b; cf. also Kelp 2021a). The aim of the project "The Varieties of Inquiry" is to contribute to this change of paradigm by *elucidating the nature, aims and norms of inquiry through the examination of its different varieties*. One crucial point is that inquiring into a question can both designate a *mental activity* (such as mentally examining whether *p*) and a *practical activity* (such as gathering evidence apparently relevant for deciding whether *p*). The aim of this project will then be, more precisely, to understand each of these two dimensions of inquiry, and how they articulate with each other.

Elucidating the nature, aims and norms of the *mental* activity of inquiring into a question will centrally involve elucidating those of the different *interrogative attitudes* involved in this activity (e.g. wondering, being curious, examining, deliberating, or suspending judgement). This is what subproject A "The Variety of Interrogative Attitudes" will be devoted to. This subproject will itself be split in two subparts. A1 will be about the metaphysical nature of our various interrogative attitudes, how they differ from, or are similar to, one another, whether they aim at anything, and which of them are necessary and/or sufficient for an inquiry to take place. A2 will be about the norms of these interrogative attitudes – more specifically, about what non-interrogative attitudes are normatively incompatible with them, and what non-interrogative attitudes are required for having them.

Elucidating the nature, aims and norms of the *practical* activity of inquiring into a question will centrally consist in elucidating those of our diverse *inquisitive undertakings*, as we may call them, and the various *inquisitive actions* they involve (e.g. allocating or not a certain amount of time, attention, energy, or money to the treatment of a given question – for instance, to the exploration of a given hypothesis, or to gathering more evidence about it). This is what subproject B "The Variety of Inquisitive Undertakings" will be devoted to. More precisely, this subproject will focus on two different major forms of inquisitive undertakings: scientific inquiry and legal inquiry. Subpart B1 will be about scientific inquiry, and more particularly about how it teleologically and normatively differs from "ordinary" inquiry, whether "non-epistemic values" are admissible in scientific inquiry, and how to understand the normative nature of the considerations of *pursuitworthiness* that are central to its regulation. Subpart B2 will be about legal inquiry, and more specifically about the question of how it resembles or differs from scientific inquiry, both teleologically and normatively. This last question will be addressed, in the main, via the elucidation of two paradoxes of statistical evidence: that about racial or social profiling, which rather concerns early stages of legal inquiries; and the "puzzle of statistical evidence", which rather concerns, in the literature, late stages of legal inquiries – trials, typically.

Even though the two subprojects A and B can and will be carried out separately – which is safe methodology –, one of the major aims of the Project is to combine their results so as to decisively clarify the nature and norms of inquiry in its mental and practical dimensions, and then to understand how they articulate with each other.

# 1. Current state of research in the field

Five ongoing philosophical discussions have immediate connection with subprojects A and B. Three of them are closely interconnected: that on how to conceive curiosity and wondering, and the nature and norms of interrogative attitudes in general (see §2.1.1), that on the aim of inquiry (see §2.1.2), and that on the normative incompatibility of inquiry with belief/knowledge (see §2.1.3). These debates are directly relevant to subproject A. Two other lively debates clearly matter for subproject B: that on scientific pursuitworthiness (see §2.1.4), and that on legal standards of proof (see §2.1.5).

## 1.1. On wondering, being curious, and other interrogative attitudes

Friedman (2019b) has recently compared the case of a) an ordinary detective who, on a crime scene, engages in activities that are typical of a criminal investigation (e.g. “examining the crime scene, interviewing witnesses, and taking notes” (Archer 2021)), and that of b) a detective who in fact is the murderer, but who engages in the very same activities in order to conceal this fact from their colleagues. What this comparison shows is that no series of physical activities can be sufficient for one to count as (genuinely) inquiring into a given issue. What is at least necessary for this according to Friedman is that one has an *interrogative attitude* (IA) towards the question  $Q$  at issue. Interrogative attitudes are for Friedman (2013a) a kind of attitudes the content of which are *questions* and not propositions – which makes these attitudes “question-directed”. But, she adds, “not every question-directed attitude is an interrogative attitude” (Friedman, forthcoming). For instance, grasping or understanding are for her question-directed attitudes that are not interrogative. What distinguishes IAs is that they are “askings”: “One has an IA towards  $Q$  if one is asking  $Q$ ” (Friedman 2019b).<sup>1</sup> Now, this requires, in Friedman’s view, that we suspend judgement on  $Q$ , the issue in question. On Friedman’s view, indeed, one cannot have one’s judgement suspended on a given question without being in an inquiring state of mind towards it and vice-versa.<sup>2</sup> This claim has elicited much debate. We shall not rehearse this discussion here, and shall simply mention the frequent objections that: a) one can suspend judgement on issues one takes to be undecidable, but our taking them to be so is impossible with being in an inquiring state of mind towards them (against suspension being sufficient for inquiry); b) it is possible for one to be in such a state of mind on whether  $p$  while believing, or even knowing, that  $p$  is true (against suspension being necessary for inquiry).

Another of Friedman’s influential view is that our different IAs – wondering, being curious, contemplating, examining, deliberating, etc. – can then be characterised as different “ways of trying to figure something out” (Friedman 2019b). Following on from this thesis, there is a burgeoning literature on wondering, being curious, inquiring, and the interrelation between them. While wondering whether  $p$  and being curious whether  $p$  are often taken to be similar or identical, Drucker (forthcoming) notes that they “are different: one can be curious without wondering, and one can wonder without being curious”. For instance, I can be not curious whether  $p$ , but wondering whether  $p$  because asked to do so, and I can be curious whether  $p$  but have more pressing things to do than wondering whether  $p$ . Under that view, wondering is an activity one can be engaged in for many reasons, and one does not necessarily care about whether  $p$  when one wonders whether  $p$ . In other words, for Drucker wondering whether  $p$  does not necessarily involve a desire to know whether  $p$ . Furthermore, wondering is not an attitude but

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<sup>1</sup> On questions and inquiry, see also (Archer 2019), (Deigan 2021, 2022), (Habgood-Coote 2022) and (Hookway 2008b).

<sup>2</sup> On suspension and inquiry, see also (McGrath 2021a, 2021b), (Palmira 2020), and (Raleigh 2019).

an activity, and as such takes time – “like thinking”, but contrary to “having a belief or [...] a desire”. Drucker also claims that wondering is the activity of considering potential answers to a question (which is more specific than “thinking things through” and differs from mere mind-wandering) whereas inquiring is the activity of gathering new evidence, which “is no part of wondering”. In contrast, for Archer (2018, 2019, 2021) claims both wondering and inquiring aim at answering a question,

When it comes to the relations between wondering whether  $p$ , being curious whether  $p$ , and desiring to know whether  $p$ , Drucker holds that wondering is not the sort of state or attitude that can be satisfied (which, he adds, goes for activities in general, that are atelic in that sense), while satisfaction is essential to desire. He also holds that wondering is not a source of motivation, contrary to curiosity. Neither is being curious whether  $p$  the same as desiring to know whether  $p$ . One can be curious whether  $p$  without wanting to know whether  $p$  – for instance when one knows that if one were to come to know whether  $p$ , something much more terrible than having one’s curiosity unsatisfied would happen. And it is possible for one to want to know whether  $p$  (for example, whether this is a safe financial investment) without being curious whether  $p$ . For Whitcomb, knowledge is to curiosity “like nourishment to hunger”: anything short of knowledge, such as merely apparent truth, would not satisfy curiosity. In Carruthers’ view (2018), curiosity is a desire-like affective motivational mental state that, contrary to genuine desires, is not directed towards a state of affairs but towards a question.<sup>3</sup>

## 1.2. On the aim of inquiry

When our ordinary detective has an IA towards the question of who committed the crime, it is apparently uncontroversial that they engage in their activities that are typical of criminal investigation “with the aim of figuring out” who committed the crime (Friedman 2017), or with the aim of “answering the question”. A natural thought then is that such activities aim at knowing who is the murderer, and that a genuine inquiring activity has the “constitutive aim” – that makes this activity “what it is and distinguishes it from all other activities” (Archer 2021) – of *knowing* the answer to the question at issue.

However, the idea that inquiry has a constitutive aim, and the idea that this aim is knowledge, are both disputable. It is certainly true that if inquiring is, as it clearly seems to be, an intentional activity, then all inquiries aim at something in the minimal sense in which all intentional activities aim at something. But is this sufficient to say that all inquiries have a “constitutive” or “structural” aim (Friedman 2022) – and, a fortiori, to say that knowledge is this aim? Is it even indisputable that inquiring into  $Q$  aims at “answering”, “settling”, or “closing”  $Q$ ? This idea is often taken for granted, and what would be a matter of dispute then is: a) whether this means that inquiring into  $Q$  aims at belief, justified belief, (maximal) certainty, true belief, knowledge, understanding, etc., on the answer that settles  $Q$ ; b) whether this depends on what is at stake and/or on the personal goals of the inquirer.

Archer’s case of the “modest economist” (Archer 2021), who inquires into an economy question while knowing that *knowing* the answer to this question would be an unreachable epistemic aim, and so who does not aim at acquiring knowledge of its answer when inquiring into it, also speaks against the more general idea that inquiring into  $Q$  always aims at “answering” or “settling”  $Q$ . He however maintains that inquiry does have a constitutive aim, as he endorses “the following necessary and sufficient condition for a piece of information gathering/analysis to qualify as inquiring into some question,  $Q$ : [...] One is inquiring into some question,  $Q$ , only if one is gathering/analysing information that one (tentatively) takes to be relevant to answering  $Q$  with the aim of

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<sup>3</sup> On curiosity, see also (Carruthers 2022), (Haziza 2022) and (Ross 2020).

improving one's epistemic standing with respect to  $Q$ " (*ibid.*). Friedman (2022) however has recently expressed doubts not just concerning the idea there is one single epistemic good that all inquirers try to acquire, but also concerning the idea that they try to acquire an epistemic good when inquiring.<sup>4</sup>

Regarding the question of whether there is a constitutive aim of inquiry, Drucker's claim that inquiries are activities that can be thought of as open-ended processes with no endpoints built in (Drucker, forthcoming). For Drucker, if one aims at e.g. knowledge when inquiring into  $Q$ , one's attaining knowledge on the issue in question is not metaphysically incompatible with going on with an inquiry into  $Q$  (while one cannot go on doing a 100-metre run after having crossed the 100-metre line).

### 1.3. On the normative incompatibility of inquiry with belief/knowledge

Supposing that all inquiries have a (constitutive) aim, succeeding in reaching it is neither necessary nor sufficient for them to be normatively correct, or appropriate, and vice-versa: supposing the aim of any inquiry is to settle a question, or to attain knowledge on the issue in question, one's inquiry into a given question will not necessarily be inappropriate if this aim is not attained – for instance if there were good practical reasons to inquire into this issue, or if one's inquiry was not normatively incompatible with one's other non-interrogative attitudes. Conversely, attaining this aim will not necessarily make the inquiry in question appropriate – for instance if inquiring into  $Q$  is normatively incompatible or incoherent with one's other non-interrogative attitudes (if these attitudes are correct), or if one should have done something else than inquiring into  $Q$  between time  $t_1$  and  $t_2$  (e.g. saving the planet instead of counting the grains of sand in one's left shoe).

For Friedman (forthcoming), there are potentially three different series of norms of inquiry, related to its three different main moments:

1) When is it appropriate to put a question "on one's research agenda", i.e. to start having an IA toward a question (e.g. wondering whether a given proposition is true)? Since for Friedman, as we have seen, suspension of judgement is necessary to any IA, elucidating the norms of suspension of judgement will be relevant to this question.

2) When is it appropriate to *actively* inquire into a given question? Given that one cannot simultaneously actively inquire into all the questions that are on one's research agenda (e.g. into all the things one wants to know)? How should one's research agenda be ordered?

3) When is it appropriate to close an inquiry? For Friedman, the beginnings of an answer to this question is: when one ought *not* to suspend one's judgement on the question at issue.

Most of the current debates concerning the norms of inquiry are about (1) and (3), and, more precisely, about whether inquiring (or going on inquiring) into whether  $p$  is normatively compatible with knowing, or believing, that  $p$ . The "Ignorance Norm" (Friedman 2017, 2019b; van Elswyk and Sapis 2021; Whitcomb 2017) is, roughly put, the idea that one ought not inquire into whether  $p$  while knowing that  $p$  (see Willard-Kyle 2022 for a similar idea). The idea that belief and inquiry are normatively incompatible is conceived by Friedman (2019a, 2019b; see also Kelp 2021) as follows: "One ought not to: believe that  $p^Q$  at  $t$  and inquire into  $Q$  at  $t'$ " (Millson 2020). This "DON'T BELIEVE AND INQUIRE (DBI)" norm does not need to be grounded in the idea that believing that  $p$  is having closed an inquiry into whether  $p$  by concluding that  $p$  (Berger 2022). DBI can indeed be explained by

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<sup>4</sup> On the aim of inquiry, see also (Falbo 2022) and (Kelp 2014).

the more modest claim that belief – contrary to “very high and very low credences” for instance (Friedman 2019b) – is a “question-settling attitude” (Lee 2020) that is as such incoherent or rationally incompatible with interrogative attitudes (Friedman 2017, 2019b).

The main argument, in the literature, against the Ignorance Norm is that knowledge – *pace* the sceptic demands – does not require certainty, and that in cases in which one knows that  $p$  but the consequences of being wrong on whether  $p$  would be catastrophic, it is intuitively appropriate to inquire (again) into whether  $p$  (see Millson 2020, Falbo 2021, Woodard 2022). The main argument, in the literature, against DBI is that if it is admitted that seeking to confirm that  $p$  at  $t$  is inquiring into whether  $p$  at  $t$ , and that, as Millson puts it, “one may: seek to confirm that  $p$  at  $t$  and believe that  $p$  at  $t$ ”, it follows that “one may: inquire into whether  $p$  (by seeking  $p$ ’s confirmation) at  $t$  and believe that  $p$  at  $t$ ”. Both of these premises can however be contested. It is important in particular not to confuse a) cases in which one takes the question whether  $p$  to be settled but nonetheless double-checks that  $p$  for independent reasons (e.g. convincing one’s partner) with b) cases in which one double-checks that  $p$  or inquires into whether  $p$  because one does not take the question to be settled.

#### 1.4. On scientific pursuitworthiness

When it comes to the second series of norms of inquiry mentioned above – those concerning when it is appropriate to *actively* inquire into a given question (rather than into some other), and how to do so –, a most relevant debate in the literature is that about the pursuitworthiness of scientific questions, hypotheses or theories. Assessing a theory as pursuitworthy is, as Whitt (1992) puts it, a “future-oriented affair” that does not consist in deciding whether it “is true, provides the best explanation, or has the highest problem-solving effectiveness”. That is, it does not consist in an “epistemic appraisal”, but in deciding whether the theory is promising enough, (see Whitt 1990, McKaughan 2008). Assessing a theory as pursuitworthy then is a positive “heuristic appraisal” (Nickles, 2006) of the theory: it deserves that we “invest our efforts in it” given its “potential for the future” (Whitt 1992).

But the pursuitworthiness of hypotheses and theories is not radically independent from the epistemic assessment of their truth or problem-solving efficiency. More precisely, it seems unlikely that a theory or hypothesis that does not satisfy most of Kuhn’s criteria of “good theories” – e.g. empirical adequacy, predictive success, consistency (internal as well as external, i.e. vis-à-vis extant accepted theories), scope or explanatory power, simplicity, etc. – can be assessed as promising and pursuitworthy (see Šešelja and Straßer 2013). From that perspective, assessing a theory as pursuitworthy or not can also be described as involving a “plausibility assessment” (Nickles, 2006), and this assessment should follow the norms of “the logic of pursuit and/or of preliminary evaluation of hypotheses” (R. Tursman, *cit. in* Šešelja, D. and Straßer 2014).

However, for McKaughan (2008), even if based on an “epistemic evaluation”, a “pursuitworthiness judgment” concerning which question or hypotheses – or more generally which “lines of inquiry” – are promising is a “practical” judgement about “what courses of action to pursue given our values and given the information and resources at our disposal”. In a similar perspective, justification for pursuit is based for Nyrup on “pragmatic factors such as: the expected cost of testing the hypotheses (in terms of time, money, energy, computational power, etc.); how easy it would be to carry out these tests; ...how interesting the hypotheses are” (Nyrup 2015)

It is with (Fleisher 2022) that a direct connection between the literature on pursuitworthiness and recent work on zetetic, inquiry-related, normativity is established. For Fleisher zetetic norms are “non-evidential” but “do not look merely practical”. These norms “include norms governing whether a question is worth inquiring into, whether

inquiry should continue, and whether more evidence should be gathered”. Fleisher argues more specifically for the existence of a *sui generis* type of reasons – “inquisitive reasons” – that “constitute one part of zetetic normativity”. Inquisitive reasons divide into: a) “promise reasons” (or “pursuitworthiness considerations”), which concern “[f]eatures of a theory itself that favor pursuing the theory, even where there is inadequate evidential support to warrant accepting the theory”, because these features are “likely to promote successful inquiry [...] in the right kind of way”; b) “social inquisitive reasons concerning the social circumstances of pursuit”. Both kinds of reasons, Fleisher argues, are epistemic, which “provides another argument for an expansive, zetetic epistemology” (*ibid.*).

### 1.5. On legal standards of proof

One central debate in legal epistemology is very relevant to the project “The Varieties of Inquiry”: the debate about what justifies extant legal standards of proof given the aims of trials and legal inquiries.

The “beyond a reasonable doubt” (BARD) standard is used in criminal cases in most Western democracies, whether European civil-law systems, or common-law systems, while the less demanding “preponderance of evidence” standard is used in most civil cases. In between these two standards in terms of demandingness, the “clear and convincing evidence” standard is used in the US “in equity cases, such as right to-die hearings, wills, libel, child custody, paternity disputes, and commitment to mental institutions” (Gardiner 2017). The “reasonable suspicion” standard – the satisfaction of which is required in the US for a brief stop and search of an individual (*ibid.*) – is the less demanding of all. It is a matter of debate whether the *raison d’être* of these different standards is that more or less demanding standards should be employed depending on the seriousness of the crime and/or the associated punishment – i.e. depending on what is at stake. If so, it has been argued that in capital cases maybe the standard should be higher than in other criminal cases – e.g. “beyond any doubt” (on this question, cf. Sand and Rose 2003, Lillquist 2005, Hoeffel 2017).

Most of the current debates in legal epistemology concern the BARD standard. According to Laudan (2006), this standard is “obscure, incoherent and muddled”. Laudan argues in particular that it confounds epistemic reasons with subjective confidence and generates a lot of false acquittals. Even if it is true that, as generally admitted, erroneous convictions are much worse than erroneous acquittals (Blackstone’s famous maxim to the effect that “it is better that ten guilty persons escape than one innocent suffer” being a way of expressing this idea), BARD is overly demanding according to Laudan. In other words, BARD does not represent an “optimal trade-off” between “the costs of judicial error and the costs of error avoidance” (Fisher 2021). Against this view, it has been argued that even if it is true that if a standard of proof “generates less harm than another, it is preferable to that extent” (Gardiner 2017), this does mean that these are the only considerations to be taken into account when deciding how a standard of proof should be. People’s rights for instance also matter, and merely optimizing the trade-off between erroneous convictions and erroneous acquittals may not sufficiently take these rights into account. A standard of proof must also be determined in such a way that it makes the legal system and its verdicts legitimate in citizens’ eyes. It seems for instance that when it comes to criminal cases and the associated punishments, society accepts guilty verdicts, and does not take them to be unjust, when they are based on “a great deal of certainty” (Lillquist 2005), *a fortiori* in capital cases.

## 2. Detailed Research Plan

### 2.1. Subproject A and subproject B: synopsis

#### *Subproject A: The Variety of Interrogative Attitudes*

##### Subpart A1: The nature of interrogative attitudes

- What needs to be the case for an inquiry to take place?
- What is the metaphysical nature of our various interrogative attitudes?
- What are, if any, the aims of our various interrogative attitudes?

##### Subpart A2: The norms of interrogative attitudes

- What non-interrogative attitudes are normatively incompatible with inquiring?
- What non-interrogative attitudes are normatively necessary for inquiry?
- What non-interrogative attitudes to have for having interrogative attitudes to be appropriate?

#### *Subproject B: The Variety of Inquisitive Undertakings*

##### Subpart B1: The aims and norms of scientific inquiry

- Are zetetic norms and considerations of pursuitworthiness epistemic?
- Are “non-epistemic values” admissible in scientific inquiry?
- Are “ordinary” and scientific inquiry subject to different norms?

##### Subpart B2: The aims and norms of legal inquiry

- Do legal inquiries aim at any epistemic standing?
- On standards of proof and other norms of legal inquiries.

### 2.2. Subproject A: The Variety of Interrogative Attitudes

#### 2.2.1. Subpart A1: The nature of interrogative attitudes

- *What needs to be the case for an inquiry to take place?*

As we already noted, for Friedman one cannot suspend judgement on a given question without being in an inquiring state of mind towards it, and vice-versa. In this subpart of the project “The Varieties of Inquiry”, we would like to examine both of these claims by focusing on the question “What needs to happen for an inquiry to start?” (Friedman 2019b). One of the ways in which we want to explore the question “What needs to happen for an inquiry to start?” is to re-examine the validity of Peirce’s doubt-belief model of inquiry, according to which inquiry is the “struggle to attain a state of belief”, where this struggle begins with, and is caused by, “the irritation of doubt” (that “stimulates us to action”) and ceases “with the cessation of doubt” and the “satisfaction” that goes with this, i.e. when a calm and satisfying state of belief is attained (CP. 5.373–5). These are not for Peirce just descriptive claims: inquiry should start with, and be conducted in, a dissatisfactory or unpleasant state of real or “living doubt”, and inquiry “must stop” when “doubt is set at rest”, when we have freed ourselves from it (CP. 7.315).

The doubt-belief model of inquiry has raised many questions: isn’t it metaphysically possible to inquire into a question without being in doubt as to how to answer it? It is really the case that “inquiry is undertaken only in response to a belief-habit’s being disrupted by experience” (Haaek 2014a)? Why should doubt be necessary for an inquiry to be appropriate? Does not Peirce commit the fallacy of switching from the (disputable) descriptive claim that when we believe that  $p$  we take the question whether  $p$  to be settled to the claim that belief is the goal of inquiry? Our own goal in this subpart is to explore the idea that doubt has both a conative and a strong affective dimension – contrary (arguably) to suspension of judgement –, and that this makes this attitude central to inquiry.

In this vein Hookway (1998, 2002, 2008a) has suggested the idea that doubt is a form of “epistemic anxiety”. For Hookway doubting that  $p$  consists in evaluating one’s epistemic situation on whether  $p$  is dangerous, where this does not merely consist in judging the question of whether  $p$  to be evidentially unsettled, but also in desiring to avoid this danger. This is why doubt immediately motivates one to avoid the epistemic danger through inquiry. This raises many questions: why do we appear to sometimes react to epistemic anxiety and risk by actively inquiring into the issue in question, and sometimes simply suspend our judgement and postpone any active inquiry about this issue? Does this crucially depend on whether we believe that we could reduce the epistemic risk by inquiring? The recent literature on epistemic anxiety will be very relevant here (Vazard 2021, 2022; Newton 2022). A hypothesis we would like to explore in this context is the hypothesis that just as Peirce/Hookway’s model suggests that a doubt devoid of a conative and affective dimension is not “real doubt” and cannot motivate any “genuine” inquiry. Furthermore, maybe a similar distinction should be made among the other interrogative attitudes, between those that are *genuine*, and those that are not so? More specifically, maybe the mental act of putting a question on one’s research agenda is not sufficient for having a genuine interrogative attitude towards this question? Maybe some affective and conative conditions must be satisfied?<sup>6</sup>

• *What is the metaphysical nature of our various interrogative attitudes?*

In this part, we would like to focus on the variety of our interrogative attitudes and consider how they (possibly) differ and what they (possibly) have in common. The final objective is to offer a metaphysical map of our various interrogative attitudes that would also include things such as considering a question, examining or exploring it, or suspending judgement about it. In line with the hypothesis raised in foregoing paragraph, we also want to examine whether (certain forms of) doubt should be included into the list.

We would like to explore in particular the intriguing case of wondering, and the hypothesis that it is central to any genuine inquiry (contrary maybe to doubt and suspension of judgement). The nature of wondering is intriguing because “wondering whether  $p$ ” can both designate a (mental) activity that can, as such, be interrupted, and also something that does not unfold over time and cannot be interrupted. Consider the following two examples:

- 1) “What were you doing during the last ten minutes in your office? —Well, after what you had just said to me, I was wondering whether  $p$ .”
- 2) “Given what you just said, now I’m wondering whether  $p$  – let me think about this in my office.”

It seems to us that wondering whether  $p$  in the second case has no genuine duration, as suggested by the fact that it does not make sense to say, regarding the second case, “maybe you have started but not finished your act of wondering whether  $p$ ”. As Hacker (2013) has remarked after Geach (1958, 1969), one cannot be halfway through wondering whether  $p$  which means that there is a sense of wondering that cannot take time. But while wondering in that sense does not have temporal extension, one can, however, be in the process of wondering *about*  $p$  with the aim of determining whether  $p$  is acceptable as an answer to a given problem. This is an activity; this is something in which one can be engaged for a period or interval of time. More generally, in this subpart of the project, we would like to examine which interrogative attitudes should really be categorised as attitudes rather than as activities and understand, thereby, the relation between the active, whether mental or practical, process of inquiring and what Friedman characterises as interrogative attitudes.

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<sup>6</sup> On doubt and inquiry, see also (Scott-Kakures 2021).



- *What are, if any, the aims of our interrogative attitudes?*

The goal of this subpart of the project is to explore the questions: a) whether our different interrogative attitudes aim at anything, b) if so, at what. Is it, for instance, the case that wondering whether  $p$  aims at answering whether  $p$  in the sense that, when wondering whether  $p$ , one *ipso facto* desires to answer this question? Or does wondering whether  $p$  aim at something “simply” in the sense that this attitude or activity has success or correctness conditions – namely, answering whether  $p$ , or, more specifically, attaining e.g. truth or knowledge on whether  $p$ ?

Relatedly, we would like to address the claim that activities are open-ended processes that have no success conditions, and that wondering whether  $p$  belong to such activities.

Regarding the question of the aim of inquiry, it seems to us that the following problem, issuing from remarks from Donald Davidson (2000) has not received enough attention: how is it even possible to inquire into any empirical matters if the aim of inquiry is truth (or knowledge) and one takes truth to be objective? The problem can be reconstructed as follows (see Gaultier 2017):

- 1) if inquiring into whether  $p$  consists in aiming at forming a true belief on the question of whether  $p$  by collecting and evaluating evidence concerning this question;
- 2) if, for any empirical proposition  $p$ , one takes the truth or falsity of  $p$  to be objective—that is, to be independent of what one believes or could believe to be indicated by the evidence one has or could have, and to consist in the non-epistemic fact that things are the way they are said to be in  $p$ ;
- 3) if one cannot aim at something if one thinks one will not, and will never be, in a position to decide whether or not it has been attained;
- 4) then one cannot aim at forming a true belief on the question of whether  $p$  by collecting and evaluating evidence concerning this question;
- 5) which means, according to (1), that one cannot inquire into whether  $p$ .

However, it is indisputable that we constantly carry out inquiries. Therefore, for it to be possible for us to carry out inquiries, supposition (1), (2) or (3) must be false. Davidson rejects (1), contrary to pragmatists like Richard Rorty (2000), who instead chooses to reject (2) – that is, to “epistemicise” or “accessibilise” truth. For Davidson, truth is objective (in the sense indicated in (2)), but it is not something we pursue and for which we strive in our inquiries. When we inquire into whether  $p$ , we aim at something we will be in a position to decide whether or not it has been attained: justified, rational, or well-grounded belief. If (2) is admitted, then either (1) or (3) has to be rejected. Hookway (2007, 2012), Levi (2012) and Price (2003) all tried to reject (3), but we think that (3) is well and truly correct. We would like to explore this idea – and the related claim that one can only *wish* or *hope* to form true beliefs –, and what follows about how to escape the intuitively wrong conclusion (5).

### 2.2.2. Subpart A2: The norms of interrogative attitudes.

- *What non-interrogative attitudes are normatively incompatible with inquiring?*

As we have seen, the “DON’T BELIEVE AND INQUIRE (DBI)” is the claim that “one ought not to: believe that  $p$  at  $t$  and inquire into  $Q$  at  $t$ .” As we indicated, the most discussed argument against DBI is that seeking to confirm that  $p$  or double-checking that  $p$  can be appropriate inquiries into whether  $p$  even if done while believing that  $p$ . The aim of this subpart is to examine the validity of this norm. DBI seems to be based on the idea that, belief being a question-settling attitude, it would be incoherent for one to both believe that  $p$  and to inquire into whether  $p$  (since inquiring into whether  $p$  requires not taking the question of whether  $p$  to be settled). But here is a combination of hypotheses whose truth would cast doubt on DBI: i. inquiring into whether  $p$  is only incompatible

with not being openminded on whether  $p$ ; ii. believing that  $p$  does not imply not being open-minded on whether  $p$ .  
i. and ii. are two hypotheses we would like to explore in this subpart.

- *What non-interrogative attitudes are normatively necessary for inquiry?*

Let us turn now to the question of what non-interrogative attitudes it is necessary to have for having interrogative attitudes to be appropriate.

One can find in Hookway's analyses of doubt as epistemic anxiety the idea that even though not really doubting the truth of  $p$  does not make inquiring into whether  $p$  *wrong*, it would be *better* to doubt it when inquiring into such questions. This is because if one merely evaluates a proposition as doubtful given the available evidence, but does not really doubt it, then for this proposition to be neutralised – as it should be – in one's inquiries, one will have to be constantly vigilant not to rely on it in one's inferences and to constantly remember that it is doubtful. But if one really doubts the truth of this proposition, it will be more safely and easily neutralised in one's inquiries. In short, for Hookway, our inquiries are better regulated if one really doubts the propositions.

- *What non-interrogative attitudes to have for having interrogative attitudes to be appropriate?*

Regarding the question of what non-interrogative attitudes to have for having interrogative attitudes to be appropriate, Willard-Kyle (forthcoming) defends the following "KNOWLEDGE NORM FOR INQUIRY": "One ought to: inquire into (an unconditional question)  $Q$  at  $t$  only if one knows at  $t$  that  $Q$  has a true (complete, and direct) answer".

To examine this norm, we intend to turn to the literature –neglected in current epistemological debates on inquiry – apropos Peirce's claim that rational inquiry necessarily goes with certain assumptions or hopes about the questions at issue. According to Peirce, certain "assumptions", "presuppositions", or "hopes" are "necessary" for any inquiry to take place and to be "explicable". And these "assumptions", "presuppositions", or "hopes" also are "indispensable" for any inquiry to be "comprehensible" and "rational". More precisely, for any inquiry to be rational, it has for Peirce to involve certain assumptions that we "must somehow embrace" (Misak 2011) ("however destitute of evidentiary support it may be" (CP7.219)), but that we should not believe.

From the fact that "the hope of success" is necessary for any action to be rational (CP 2.272), it follows for Peirce that any rational inquiry into whether  $p$  requires having the hope that the question of whether  $p$  "has a definite answer" (Hookway 2002). However, we have no guarantee for Peirce that our inquiries will ever succeed. In this part of the project, we would like to rely on the cast light on the norms of inquiry (such as Willard-Kyle's Knowledge Norm) by relying on these pragmatist views about rational inquiry.

## 2.3. Subproject B: The Variety of Inquisitive Undertakings

### 2.3.1. Subpart B1: The aims and norms of scientific inquiry

- *Are zetetic norms and considerations of pursuitworthiness epistemic?*

Our aim here is to rely on contemporary debates about the intriguing nature of epistemic normativity to decide whether considerations of pursuitworthiness and zetetic norms are epistemic, practical, or constitute a *sui generis* domain of normativity. As mentioned above, there exists a debate as to whether the evaluation of a theory as pursuitworthy is an epistemic or a non-epistemic (practical) assessment 2). For McKaughan (2008), a "pursuitworthiness judgment" is not an "epistemic evaluation" but a "practical" judgement about "what courses of [inquisitive] action to pursue". As noticed as well, Fleisher (2022) disagrees: such evaluations, though non-evidential, are not practical but epistemic. They are based for him on this subcategory of "inquisitive reasons" that concern what is "likely to promote successful inquiry (and to promote it in the right kind of way)". In order to

show that, contrary to practical reasons, “inquisitive reasons have the same kind of independence and non-hypothetical force as evidential reasons” – which both “supports the idea that there is an independent epistemic domain of normativity” and the idea that “inquisitive reasons as part of that domain” –, Fleisher advances the following case:

Archer is an archaeologist researching the origin of a particular style of ancient pottery. There are two hypotheses in the field: a Mayan origin and an Inuit origin. Pursuing the Mayan hypothesis involves working in very pleasant weather, while the Inuit hypothesis involves very unpleasant weather. Archer does not care about the truth, and cares a great deal about the weather. There is almost no one working on the Inuit hypothesis, so Archer could contribute a great deal to that project. The Mayan hypothesis has a glut of researchers and little ground-breaking work remains to be done. In this case, Archer himself does not have the desire to promote successful inquiry. For his own goals of working in pleasant weather, he has strong practical reason to pursue the Mayan hypothesis. But he clearly has inquisitive reason to pursue the Inuit hypothesis. We can still evaluate him (negatively), from the perspective of inquiry, if he pursues the Mayan hypothesis and not the Inuit hypothesis.

The good reasons there are to pursue the Inuit hypothesis are inquisitive reasons, for Fleisher. If Archer had followed them, he would have done “a good job of inquiring”. The good reasons there are for him not to pursue the Inuit hypothesis (i.e. working in bad weather) are practical reasons, not inquisitive reasons. This seems to imply that if he had been fond of working in bad weather conditions, and had pursued the Inuit hypothesis just for that reason, Archer’s inquiring into this hypothesis would not have been, for Fleisher, normatively appropriate, as he would have not “promot[ed] successful inquiry in the right way”, “as determined by the internal standards of the practice of inquiry” (*ibid.*). We are not certain however that this way of distinguishing proper zetetic reasons from merely practical reasons is really satisfying. We think that in order to best explore this issue it is necessary to turn to the contemporary debates that discuss the difference between the epistemic and practical reasons to believe, as well as the distinction between the wrong and the right kind of reasons. One worry with this example is that it is not as simple as it seems to make sense of the difference between the inquisitive and the practical reasons so pursue a hypothesis. After all, both reasons are grounded in the desirability of the hypotheses in question: the Mayan hypothesis is desirable from the, say, hedonic, point of view while the Inuit hypothesis is desirable from the point of view of its novelty, potential ground-breaking aspect. Even though these are two different ways of assessing the two hypotheses, they are not categorically different kinds of evaluation. In contrast it has often been said that the epistemic evaluation and the practical evaluation of a belief belong are categorically distinct: the epistemic reasons to believe are reasons of the right kind while the practical reasons are reasons of the wrong kind. This explains, according to certain, why we cannot weigh the epistemic against the practical reasons to believe). But maybe it is nevertheless—even if we doubt that this example illustrates this—possible to draw the same line of delineation in the case of inquiry. Are they right and wrong kind of reasons to inquire? And if this is the case does this give us reasons to bring zetetic reasons closer to epistemic reasons?

• *Are “non-epistemic values” admissible in scientific inquiry?*

By relying on the contemporary debates about the nature of epistemic normativity, we think we can also shed new light on a much-discussed and most important debate in philosophy of science: that of whether “non-epistemic values” are admissible in scientific inquiry. It is quite uncontroversial that we may have practical reasons to inquire into a given question (cf. Goldberg 2021) and that our scientific inquiries may have both epistemic aims (extending our knowledge or understanding in a certain domain) and practical aims (e.g. finding as soon as possible a vaccine that would safely protect people from a fast-spreading virus). It is also plausible to argue, a bit more strongly, that

we should pursue research that aim to satisfy certain goals we have practical, political, moral, etc. reasons to aim at. Kitcher (2004) has argued for instance that “[w]e should pursue research that aim to satisfy democratically desirable goals”. Relatedly, it seems rather unproblematic to claim that “we should not pursue research that violates acceptable moral, political, or legal norms” (e.g. “performing clinical trials without informed consent” (Shaw 2022)).

But what about non-epistemic values intervening in the assessment of scientific theories and hypotheses? Brown (2017) for instance has argued that when the epistemic standards of a scientist “support a racist conclusion, or a conclusion with racist effects”, that conflicts with her values, this scientist is right to take this conflict to be a reason “to be particularly doubtful of the work she has done in this research”. For Steel (2010) doing (and recommending doing) this amounts to “corruption of science”. Indeed, for Steel such an influence of non-epistemic values is illegitimate in scientific inquiries as it “interfere with or override the standards of adequate science”.

According to Steel, non-epistemic values may intervene in scientific inquiry only as “tie-breakers” between incompatible equally epistemically supported theories, models, or methodologies (cf. also Steel 2017). What we want to do in this subpart of the project “The Varieties of Inquiry” is to address this crucial debate on when and how non-epistemic values are admissible in scientific inquiry.

- Are “ordinary” and scientific inquiry subject to different norms?

To the question of whether ordinary and scientific inquiry are subject to different norms, two opposite answers, arguably equally plausible, can be given. The first is that all forms of inquiry, whether scientific or ordinary, theoretical or practical, are subject to the same norms, as all these forms of inquiry are “problem solving activities, and the norms we follow in carrying them out are internal to these activities of solving problems” (Hookway 2008a). This idea is in line with Haack’s claim that “[t]he core standards of good evidence and well-conducted inquiry are not internal to the sciences, but common to empirical inquiry of every kind”, and that scientific inquiry is “continuous with the most ordinary of empirical inquiry” (Haack 2007). The scientific method then just is “what historians or detectives or investigative journalists or the rest of us do when we really want to find something out: make an informed conjecture about the possible explanation of a puzzling phenomenon, check how it stands up to the best evidence we can get, and then use our judgment whether to accept it, more or less tentatively, or modify, refine, or replace it” (*ibid.*).

On the other hand, it also plausible to argue that because science has a twofold distinctive role in society – that of developing systematic knowledge and understanding about the world, and, relatedly, that of having a distinctive “public authority” regarding many public concerns, then scientists have, as such, distinctive “role responsibilities” that make their inquiries subject to distinctive norms (Douglas 2017). So, it is plausible that scientists have, even more than other inquirers, the “responsibility to consider and weigh the foreseeable consequences of error” (Antiochou and Psillos 2022) when conducting their inquiries. Douglas also argues that “[i]f the primary goal of science is to develop knowledge about the world, then the role responsibilities of scientists should be structured around this goal” (Douglas 2003). So, maybe one could argue that if science is, as Peirce has it, “a mode of life whose single animating purpose is to find out the real truth [...] and which seeks cooperation in the hope that the truth may be found, if not by any of the actual inquirers, yet ultimately by those who come after them” (CP 7.54), then science is governed by a Mertonian ethos: an “affectively toned complex of values and norms which is held to be binding on the man of science”, and which comprises four “institutional imperatives” – i.e. “universalism, ‘communism’, disinterestedness, and organized scepticism” (Merton 1973).

Most interestingly with regard to the debate mentioned above about the normative incompatibility of belief and inquiry, it is because *scientific inquirers* have, contrary to *ordinary inquirers*, finding out the truth as their “single”

goal that, for Peirce, they should i) “stand aloof from all intent to make practical applications” (otherwise they would not just “obstruct the advance of the pure science, but what is infinitely worse, [...] endanger [their] own moral integrity and that of [their] readers” (CP. 1.619)), and ii) not *believe* their theories and hypotheses to be true – as this attitude is incompatible with “the Will to Learn” (CP. 5.583). This suggests the hypothesis – that deserves to be explored further – that belief is even more normatively incompatible with *scientific* inquiry than it is with having interrogative attitudes in general.

### 2.3.2. Subpart B2: The aims and norms of legal inquiry

- *Do legal inquiries aim at any epistemic standing?*

“Injustice, and her handmaid, Falsehood”, writes Jeremy Bentham. But why, asks Haack (2016), “does factual truth matter in the law?”. In the main, it matters “because, however just the laws may be, and however just the administration of these just laws, if someone is found guilty of a crime he didn’t commit, or found liable for an injury he didn’t cause, a substantive injustice has been done”, and the verdict seems criticisable (*ibid.*). Ho (2008) indicates some other evidence for the legal importance of truth: “Commitment to the truth is manifested procedurally at a trial: jurors are sworn to give a true verdict according to the evidence and witnesses are sworn to tell the truth. The truth-seeking function also finds linguistic expression, most clearly in the use of words such as ‘proof’, ‘fact’, ‘fact-finding’, and ‘proof of fact’” (Ho 2008).

Relatedly, a legal scholar as historically important in the law of evidence as John Henry Wigmore has argued for the “necessity” of an interdisciplinary “science of judicial proof” – independent of the “artificial rules” of procedure and jurisprudence – that would be based on logic, psychology and “general experience” (Leclerc 2021). This, in order to determine how to safely reach a conclusion on the basis of facts, and to enable “jurisprudence to be a science, and not just an art” (Klappstein 2021). In a more or less similar spirit, adjudication is for Goldman (1999) a social practice of “veritistic epistemology”, where the aim is knowledge, in the weak sense of true belief. And it can be argued the “accuracy of a legal system is the frequency with which it produces or leads to correct findings” (Ross 2022a).

This suggests that truth is the aim of trial and legal inquiries in general. But is it really the case? And if not, does this mean that legal inquiries are not genuine inquiries? For Peirce, as Haack (2014a) notes, “genuine inquiry requires the ‘scientific attitude,’ that is, the genuine desire to attain the truth”. This opposes for him pseudo-inquiry, “where the goal is *not* to discover the truth” and where the norm is not to follow the evidence where it leads, but “to make the best possible case for some conclusion determined in advance” (Haack 2014b).

For Haack, whether in common-law or in civil-law systems, “what determining the truth means is arriving at a conclusion as to the facts in a legally-correct way; which is by no means the same as seeking, let alone discovering, the truth” (Haack 2016). Haack (2014b) also notes that “legal determinations are constrained [...] by non-truth-related desiderata” – e.g. “that citizens’ constitutional rights must be respected; that it is much worse to convict an innocent man than to acquit a guilty one”. This leads her to claim that “that a trial aims, not to find out [...] e.g., whether Smith murdered Robinson, but whether the proposition that Smith murdered Robinson has been established, to the required degree of proof, by the evidence presented at the trial” (*ibid.*). And this evidence excludes evidence that, though relevant on the matter at issue, “has been ruled inadmissible” (Haack 2019) (in virtue of certain “exclusionary rules”, in common-law systems). This makes a trial importantly different from a scientific inquiry, where there is nothing “analogous to legal rules about burdens and standards of proof or the admissibility of evidence” (*ibid.*).

All of this raises many questions that we will address in this subpart of the project: do such aspects of legal inquiries

really imply that they do not aim at truth, or that no legal inquirers – as may call them (e.g. jurors, fact-finders, etc.) – aim at truth? Do legal inquiries rather aim at *accepting* certain propositions that satisfy certain criteria with the *hope* that these propositions will (often) be true? Or even amount to knowledge, and/or provide understanding of the relevant facts? Do the differences between scientific inquiry and legal inquiry imply that the latter is not in fact a genuine inquiry? Given the centrality of evaluations of pursuitworthiness in scientific inquiry, and the interweaving of epistemic and practical considerations that goes with this, is legal inquiry so different from scientific inquiry? What if truth, or knowledge, is one goal of legal inquiries but not the only, or the most important, one (see Ho 2021)? What if, for instance, apparent truth, in the eyes of society, is what really matters?

• *On standards of proof and other norms of legal inquiries*

Even though elucidating the aim(s) of legal inquiries will directly contribute to clarifying their norms, a lot of normative work will remain to be done, in particular about 1) what exactly justifies these or those exclusionary rules of evidence; 2) what standards of proof to adopt, on which grounds, and how epistemically demanding they should be, for verdicts based on them to be appropriate; 3) whether – and if so, when and how – non-epistemic considerations may or should intervene at this or that stage of legal inquiries.

We think that a particularly enlightening way of addressing these three questions concerning the norms of legal inquiries is to do so via the examination of two interrelated epistemological issues that much interest not just epistemologists, but also theorists of evidence law, and, more generally, legal scholars: 1) the question of the normative profile of racial profiling – and of stereotyping in general –, which rather concerns, in the literature, early stages of legal inquiries; 2) the much discussed “puzzle of statistical evidence”, which rather concerns, in the literature, late stages of legal inquiries – trials, typically.

The first puzzle is based on the fact that the following two premises seem intuitively plausible:

- 1) if one “has strong statistical evidence that most members of a social [or racial] group have some property” – e.g. are at an increased risk of criminality –, then it is permitted for one “to believe that an individual member of that social [or racial] group will likely have that property” (Brinkerhoff 2021);
- 2) law enforcement officers should, on the basis of the limited resources they have at their disposal, prevent as many crimes as possible from being committed, and catch as many criminals as possible while the conclusion they appear to imply is not so;
- 3) law enforcement officers then are at least permitted, on the basis of this statistical evidence, a) to believe of individual members of that social or racial group that they are worthier of suspicion for crimes that have been committed than individual members of a social or racial group whose most of its members are not at an increased risk of criminality, b) to believe of individual members of the former social or racial group that they are then “worthy of increased scrutiny”, and c) to subject them “to increased scrutiny” (cf. Liu and Lang 2021, Lloyd 2021, and Atenasio 2020).

In short, the intuitively plausible premises (1) and (2) appear to imply the intuitively problematic conclusion that racial or social profiling can sometimes be permitted. Many ways of solving this puzzle have been advanced recently. One of them is the claim that (1) and (2) do not permit belief but high credence only, “because statistical evidence fails to be causally connected to the particular case under consideration” (Lloyd 2021).<sup>7</sup>

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<sup>7</sup> For more on profiling and stereotyping, see (Beeghly 2018, 2021), (Bolinger 2020, 2021), (Di Bello and O’Neil 2020), (Munton 2019), (Pundik 2017), and (Webster 2021).

The puzzle of statistical evidence starts from the observation that, intuitively, it would be inappropriate to base a legal verdict – in criminal cases at least – on the basis of very high statistical evidence alone (e.g. when there is a 1% risk of error only) while it is intuitively fine to convict someone on the basis of non-statistical, “individualized” evidence (e.g. testimony) even if the risk of error is much higher (e.g. 10%). The problem then is to explain why naked statistical evidence is, alone, “an inadequate basis for a finding of fact” (which should maybe be distinguished from the problem of explaining why, intuitively, “it is (at least sometimes) inappropriate for courts to consider such evidence at all”, or, more precisely, to count it “as evidence” when “presented in court” (Johnson King 2022)). Indeed, “irrespective of any other evidence available, it seems highly objectionable to use the high rate of crimes involving illegal firearms in a certain neighborhood to support the conviction of an individual resident in a crime involving an illegal firearm” (Dahlman and Pundik 2021). Ross has recently provided a useful categorisation of extant attempts to solve the first of these problems:

1. Epistemic diagnoses argue that bare statistics fail to confer some important epistemic property—e.g. justification, knowledgeability, safety, etc.—onto legal verdicts.
2. Moral and justice-based approaches argue that relying on bare statistics frustrates non-epistemic normative constraints on evidence law: e.g. backwards-looking considerations such as respect for autonomy or due process, or forward-looking considerations—such as ensuring legal rules have the proper incentivising effect.
3. Likelihood theories argue that legal proof should be understood in terms of the comparative likelihood of competing accounts, rather than in terms of absolute probabilities.
4. ‘Phase change’ approaches argue that bare statistical evidence becomes acceptable only when the chance of error crosses some threshold of extreme improbability. (Ross 2021b)

The idea that what is wrong with criminal verdicts based on statistical alone is that they engender “adverse reactions amongst the general public and/or the legal profession and that these adverse reactions create sufficient disutility to outset any benefit from using this evidence” (Pundik 2008), or the claim that such verdicts fail to “properly respect individuality” (Liu and Liang 2021), contrary to verdicts based on “individualized evidence” (Thomson 1986, Mortini 2022a), belong to the second category.

Let us mention three diagnoses that belong to the first: Pritchard’s view that verdicts based on statistical alone are wrong because, though likely to be true, they are unsafe (as there are “very close nearby worlds, or a significant proportion of more distant nearby worlds”, in which verdicts based on such evidence are erroneous) (Pritchard 2018, 2022); Smith’s view that such verdicts are wrong because such evidence cannot “normically support” them because it does not “generat[e] the need for special explanation in the event that [the verdict is erroneous]” (Smith 2018, 2021a, 2021b); or Moss’ view that what is wrong with such verdicts is that even though purely statistical evidence establishing that there is only a 3% risk that the defendant is innocent justifies a 0.97 credence in the claim that they are guilty, such evidence is insufficient to provide probabilistic knowledge that they are so because in the context in question having such knowledge requires a higher justified credence (while in other contexts this would not be necessary) (Moss 2022).<sup>8</sup>

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<sup>8</sup> For more on the paradox of statistical evidence, see (Backes 2020), (Blome-Tillmann 2017), (Di Bello 2019, 2020, 2021); (Enoch, Spectre, and Fisher 2012), (Enoch and Fisher 2015), (Enoch and Spectre 2019), (Gardiner 2019a, Gardiner 2020a), (Hawthorne, Isaacs, and Sridharan 2021), (Ross 2021a, 2021c), and (Smartt 2022).

We also think that it will be particularly worth investigating in this context the idea that this last series of diagnoses of the “puzzle of statistical evidence” come close to “legal doxasticism” (Ross 2022a) – i.e. the idea that there is a correspondence between legal norms for verdicts and epistemic norms for beliefs – and, more specifically, “epistemic fetishism” – i.e. the idea that certain “positive epistemic status should intrinsically legally matter” (Enoch, Fisher, and Spectre 2021). Now, it could be, according to Enoch, Fisher, and Spectre, that the “best standard of proof” is “a matter of decision-theory, unconstrained by doxastic norms” (*ibid.*). As indicated at the beginning of this section, we want to address two debates not just for their intrinsic philosophical value, but also *as a particularly enlightening way of elucidate the three normative questions mentioned above.*

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