AMALIA AMAYA

JUSTIFICATION, COHERENCE, AND EPISTEMIC RESPONSIBILITY IN LEGAL FACT-FINDING

ABSTRACT

This paper argues for a coherentist theory of the justification of evidentiary judgments in law, according to which a hypothesis about the events being litigated is justified if and only if it is such that an epistemically responsible fact-finder might have accepted it as justified by virtue of its coherence in like circumstances. It claims that this version of coherentism has the resources to address a main problem facing coherence theories of evidence and legal proof, namely, the problem of the coherence bias. The paper then develops an aretaic approach to the standards of epistemic responsibility which govern legal fact-finding. It concludes by exploring some implications of the proposed account of the justification of evidentiary judgments in law for the epistemology of legal proof.

"Only connect," said E. M. Forster (2000). But surely, this cannot be enough. After all, the most outrageous theories result from making eccentric connections. Conspiracy theories, astrological systems, and the like all arise out of connecting the most disparate elements and making them fit into a coherent whole. Witch trials too. In light of a solid corpus of beliefs about devilish women's powers, mental illness can certainly be explanatorily connected with the action of supernatural forces. Clearly, not every connection will do. This, I would argue, gives rise to the most serious problem that coherence theories of justification should face. Put bluntly, there are few limits to what the human mind may be able to connect up. This being so, the coherence of a set of beliefs cannot by itself be justification conferring, as the coherence theory of justification takes it to be. Only the right kind of "connections" is relevant to justification. In this paper, I will argue that wedding coherentism to a responsibilist conception of justification yields an account of the conditions under which coherence produces justification. Such a coherentist *cum* responsibilist account of justification provides, I shall contend, a plausible theory of the justification of evidentiary judgments in law.

 DOI: 10.3366/E1742360008000415

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

1. COHERENTISM ABOUT THE JUSTIFICATION OF EVIDENTIARY JUDGMENTS IN LAW

Coherentism, that is, the view that beliefs are justified by virtue of their coherence, is a prominent theory of epistemic justification.[1] In the epistemology of legal proof, coherence has also been claimed to play a pivotal role. Some advocates of holism about evidence evaluation take coherence to be an important criterion for determining the plausibility of the parties' explanations offered at trial (Allen 1997). Narrative coherence has also been claimed to provide a standard of justification of conclusions about disputed questions of fact (MacCormick 2005, Jackson 1988). Both holistic and narrative approaches to legal proof usefully direct the attention to the relevance of coherence in a theory of legal reasoning about facts. However, the details of a coherence theory of the justification of evidentiary judgments in law remain to be spelled out.

The main tenet of the coherence theory of the justification of evidentiary judgments in law may be succinctly stated as follows:

> A hypothesis about the events being litigated is justified only if it coheres with a body of backgrounds beliefs and the evidence at trial.[2]

Such coherence, I would argue, is of an explanatory kind. That is to say, propositions describing evidence and hypotheses at trial cohere with each other by virtue of explanatory relations. There are different views on what explanatory coherence involves (Harman 1986, Lycan 1988, and Thagard 2000). A most interesting version of explanatory coherentism is put forward by Thagard (2000). According to Thagard, explanatory coherence is a matter of the satisfaction of a number of positive constraints (arising from relations of analogy and explanation) and negative constraints (arising from relations of contradiction and competition). Thagard's theory of explanatory coherence can be fruitfully applied to the legal context.[3] On this view, a hypothesis about the events being litigated at trial is justified if and only if it best satisfies the (positive and negative) coherence constraints. In what follows, I shall assume that the kind of coherence that is relevant to the justification of evidentiary judgments may be best explained in terms of constraint satisfaction.

The coherence theory of the justification of evidentiary judgments in law has the virtue of enjoying a high degree of psychological plausibility. A solid body of empirical research gives support to the view that coherence plays a prevalent role in reasoning about evidence in forensic contexts (Hastie & Pennington 1991, Simon 2004). On this score, a coherentist epistemology of legal proof has an important advantage over Bayesian approaches to legal epistemology, which, as is well known, have been shown to be hopelessly idealized. There are other reasons which make coherentism an attractive candidate for a theory of the justification of evidentiary judgments in law. Coherentism is particularly well-suited to model the dynamics of justification; this is an important bonus in the legal context, in which

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

hypotheses need to be revised as evidence becomes available in the course of the trial. Coherence is also instrumental to a number of important values that trials are meant to serve, most importantly, the value of truth.[4] Moreover, the coherence theory can be easily modified so as to make room for the emotional components of legal decision-making (Thagard 2000). Last, given the prominence of coherence theories of law and adjudication in contemporary jurisprudence (Dworkin 1986, MacCormick 2005), a coherence theory of evidence and proof would pave the way for a unified account of the justification of conclusions about both disputed questions of fact and disputed questions of law. Thus, coherentism about the justification of evidentiary judgments in law has several reasons to recommend it. Notwithstanding, there is, I would argue, a main problem with coherentism which casts serious doubts upon the project of explaining the justification of factual claims in law in coherentist terms. To this problem I turn now.

2. THE COHERENCE BIAS

Our cognitive equipment is geared towards coherence, as Paul Ziff (1984, 34) puts it, "We humans are fanciers, connoisseurs, of coherence .... coherence catches our eye, fixes our attention, focuses our mind." There is substantial psychological evidence that shows the relevance of coherence in our reasoning processes. Empirical studies strongly suggest that we find explanatory thinking natural: considerations of explanatory coherence are the engine that drives much inference in ordinary life (Lipton 2004, 108–13). Moravcsik (1990, 213) has persuasively argued that cognition can be viewed as an activity that is directed towards the goal of achieving understanding and that humans may be viewed, in an important sense, as *homo explanans*. Simon (2004) and collaborators have shown that complex decision tasks, such as reasoning about evidence in forensic contexts, are carried out by building up coherence among a number of decision factors. That a drive towards coherence is an important feature of our cognitive equipment lends psychological plausibility to coherentism, but it is also the source of what is, arguably, its main problem. For our tendency to construct coherence causes us to find coherence where there is none. In other words, we seem to be 'biased' towards coherence and this makes the claim that coherence confers justification suspect. After all, the coherence achieved might be but the product of a fantasizing mind.

More precisely, the worry, as Lycan (1996, 18) puts it, is that "any system of beliefs might be made as coherent as anyone could wish, but still be entirely unjustified." Plantinga (1993, 81) makes the point very vividly by means of the following example. Timothy is a young artist who admires Picasso to a pathological degree. He reads in the *National Inquirer* that Picasso was an alien from outer space. As a result of his diseased veneration of Picasso, Timothy forms the belief that he too is an alien and makes the rest of his beliefs cohere with these views. Timothy's belief system is, of course, completely nuts, yet highly coherent and, therefore, justified according to coherentism. This is an extreme case of

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

'coherence bias,' (Simon 1998, 20) in which someone starts with an unfounded idea and makes the rest of his beliefs settle into a coherent pattern around it. But there are less extreme (and less far-fetched) cases in which the process whereby coherence is constructed is also vitiated in ways that make the resulting system of beliefs unjustified, despite it exhibiting a high degree of coherence. For example, a scientist may preserve the coherence of a scientific theory by systematically rejecting disturbing evidence. A conspiracy theorist may build a highly coherent theory by reinterpreting all evidence as evidence that supports the hypothesis of conspiracy rather than alternative hypotheses. Parapsychology and astrology also provide examples of highly coherent systems of beliefs, the coherence of which results from objectionable epistemic behavior, and such systems are, because of this, intuitively unjustified.

The problem of the coherence bias also threatens to undermine the case for a coherence theory of evidence and legal proof. Legal decision-makers might make a theory of the case as coherent as they wish, yet still be unjustified. Consider the following cases.

Case 1. June, a juror in a criminal trial, believes, right at the beginning of the trial, that the defendant is guilty. She makes all incoming evidence cohere with the hypothesis of guilt; rejects as unreliable a witness testimony that conflicts with this hypothesis; and interprets ambiguous evidence so that it supports the hypothesis of guilt. By the end of the trial, June has developed a highly coherent theory of the case that entails the guilt of the defendant. Even though the evidence available could be easily explained by the innocence hypothesis, June comes to accept as justified the hypothesis of guilt.

Case 2. Michael, a juror in a criminal trial, has an unshakable conviction in the integrity of the police. He maintains his belief despite the fact that the evidence at trial indicates the seriousness of the possibility that the defendant might have been framed by the police. The evidence also supports fairly well the hypothesis of guilt, but there exists, nonetheless, a coherent theory of the case, i.e., the frame theory, which is compatible with innocence. Michael fails to consider the possibility that the frame theory might obtain and settles on the guilt explanation as the only coherent explanation of the evidence at trial.

In these cases, the accepted theories of the case, while coherent, are, nevertheless, unjustified as they result from epistemically objectionable processes. The intuitive difficulty with a coherence theory of the justification of evidentiary judgments in law that the above examples illustrate is this: a fact-finder may reach coherence among the evidence and hypotheses at trial through defective epistemic processes and may still turn out to be justified according to the coherence theory. The possibility that gives rise to this objection is not merely a theoretical possibility, but rather a quite real one. Simon (2004), Holyoak, and collaborators' experimental research shows that in the course of decision-making, triers of fact restructure the diverse and conflicting considerations that provide equivocal support for different decision alternatives until they reach a coherent representation in which

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

considerations which support the chosen alternative are strongly endorsed and those which support the rejected decision are dismissed. At this point, the decision follows from the coherent representation with ease and confidence.

The empirical research shows that the reconstruction of the decision alternatives so as to impose coherence among the decision elements lies at the heart of legal decision-making. Coherence-construction seems to be an essential part of what is involved in effective decision-making. However, it seems desirable to keep these psychological tendencies from running riot. The cases discussed above suggest the need to impose some constraint on coherence-building for coherence to yield justification. Such constraints, I will argue next, are in the form of standards of epistemic responsibility. In a nutshell, I shall suggest that there is a need for a further condition on justification to supplement the coherence one: not only must it be the case that a theory of the case is coherent, but it must also be the case that such a theory could be accepted by an epistemically responsible fact-finder. What emerges, I hope, is a view of justification that exploits the drive towards coherence that guides our decision processes, while avoiding the risks inherent in coherence-based reasoning.

3. JUSTIFICATION BY OPTIMAL COHERENCE

Coherentism about evidence judgments, I have argued, is problematic in that it fails to rule out as unjustified theories of the case whose coherence is achieved in ways that compromise the integrity of the process. The suggestion is that we may amend the coherence theory, and put worries about coherence biases to rest, by incorporating a theory of epistemic responsibility as a crucial component of the coherence theory. On this view, coherence *per se* cannot yield justification, only the kind of coherence that an epistemically responsible fact-finder may reach does.

A theory of epistemic responsibility is not an extraneous component in a coherence theory. Rather, the coherence theory has a natural place for considerations of epistemic responsibility. A coherentist epistemology places the agent, who strives after coherence, at the forefront. There is a very interesting distinction in discourse theory between coherence *a parte obiecti* and coherence *a parte subiecti,* that is, between the coherence of a text as such and the coherence that an interpreter brings to a text, in other words, coherence as a product of the effort of the interpreter (Conte 1989, 276, 280). It is the presence of the latter kind of coherence that accounts for judgments of discourse coherence. Coherence does not come for free, but is rather something that has to be earned. It does not come as a label attached to objects, but it has to be built in the process of interpretation. A coherence theory is thus inextricably linked with an agent point of view, and this makes considerations of responsibility essential to justification. Responsibility may be thus viewed as an implicit – albeit underdeveloped – component of the coherence theory.

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

The coherence theory of justification of evidentiary judgments in law that results from integrating the responsibilist dimension of coherentist justification may be stated as follows:

> A hypothesis about the events being litigated is justified if and only if it is such that an epistemically responsible fact-finder might have accepted it as justified by virtue of its coherence in like circumstances.

I shall label the kind of coherence that might result from an epistemically responsible process of coherence-based inference "optimal coherence." On the version of coherentism proposed, the justification of a hypothesis about the facts being litigated is thus a matter of optimal coherence.[5] This version of coherentism allows us to deal in a satisfactory way with the problematic cases discussed above. June's and Michael's theories of the case, although coherent, could not have been the outcome of an epistemically responsible process of coherence-based reasoning, and thus are unjustified according to the theory proposed. Fact-finders who, in an effort after coherence, fail to behave in an epistemically responsible way, fall short of the proposed standard of justification. An account is now due of what epistemic responsibility requires in the context of legal fact-finding.

4. EPISTEMIC DUTIES AND INTELLECTUAL VIRTUES IN LEGAL FACT-FINDING

The notion of epistemic responsibility has been traditionally understood in terms of epistemic duties or obligations. That is to say, whether one is epistemically responsible depends on how well one has met one's epistemic duties. We may refer to this approach as the 'deontic' approach to epistemic responsibility. On a deontic approach, the epistemic responsibility of legal fact-finders would be thus a matter of epistemic duty-fulfillment. What would be the legal fact-finder's epistemic duties? There are different views about which sorts of epistemological duties there are (Feldman 2002). A duty to believe as one's evidence dictates is a prominent one in the literature. The primary epistemic obligation of fact-finders is then to believe all and only those propositions which are adequately supported by the evidence at trial. Some writers have argued that our epistemic duties involve as well other activities such as gathering evidence on propositions that are less than certain on one's present evidence, seeking out a large quantity of evidence, and so on. Arguably, fact-finders would also have a duty to gather evidence on propositions that are less than certain on the evidence available. Of course, the scope of this duty would depend on the extent to which the legal system permits fact-finders to actively participate in obtaining evidence.[6]

The deontic approach to the epistemic responsibility of legal fact-finders does succeed in identifying some core aspects of what it means to behave in an epistemically responsible way in the courtroom. Nevertheless, this conception of epistemic responsibility is too *thin* as a standard that is meant to regulate legal

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

fact-finders' epistemic behavior. It fails to capture the rich variety of ways in which fact-finders may advance their inquiries in an epistemically responsible manner. It also places too weak a demand on jurors, as they may conform to these duties and yet fail to do their best when conducting inquiry and deliberation about the facts on which their decisions turn. Strict compliance with duties in the absence of one's best effort after the truth falls short of epistemically responsible behavior. A *thicker* concept of epistemic responsibility may be found in the literature on virtue epistemology. Virtue epistemology is an approach to epistemological problems which seeks to analyze the main epistemic concepts, such as justification and knowledge, in virtue terms. There are two main kinds of virtue epistemology: a 'reliabilist' virtue epistemology and a 'responsibilist' virtue epistemology (Greco 2002). In the reliabilist versions of virtue epistemology, virtues are reliable cognitive abilities or powers, such as memory, perception, reason, or intuition. According to the responsibilist strain of virtue epistemology, intellectual virtues are personality traits or qualities of character, such as open-mindedness, perseverance, and intellectual humility, which are analogous to the moral virtues.[7] It is within this latter kind of virtue epistemology that the notion of epistemic responsibility plays a role.[8] Epistemic responsibility is understood as a kind of master intellectual virtue, from which the other virtues emanate. On the aretaic approach, whether legal fact-finders would be epistemically responsible depends on whether they are epistemically virtuous.

The aretaic approach to the epistemic responsibility of legal fact-finders has the advantage of greater richness. It also has an advantage over the deontic approach because it need not understand good epistemic practice strictly in terms of epistemic rules or norms.[9] Another advantage of a virtue-based approach to epistemic responsibility over a duty-based approach is that the former pictures epistemic agents as aiming at epistemic worth and not merely at epistemic blamelessness. A virtue-based approach to epistemic responsibility is thus a valuable normative ideal for legal fact-finders insofar as it takes them beyond avoiding blameworthiness.[10]

Now, what are the epistemic virtues that mark off epistemically responsible behavior in the context of legal fact-finding? There is a variety of views about which personality traits count as virtues (Zagzebski 1996, 114). Montmarquet's (1993, 23–6) classification of the virtues seems to me to be particularly well-suited to give some content to the idea of epistemically responsible legal fact-finding. Montmarquet distinguishes three kinds of virtues: the virtues of impartiality, the virtues of intellectual sobriety, and the virtues of intellectual courage. The virtues of *impartiality* include qualities such as openness to the ideas of others, the lack of personal bias, and a lively sense of one's fallibility. These virtues are crucial for epistemically responsible legal fact-finding. The juror exhibiting the virtues of impartiality gives every candidate hypothesis about the events at trial a hearing and seriously considers the possibility that it might obtain. She assesses the different alternatives proposed on their merits and is ready to consider objections to her

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

own views as well as to change her views in the face of new evidence or in light of good arguments that might be advanced by other jurors.

The virtues of *intellectual sobriety* are the virtues of the sober-minded inquirer as opposed to the impetuous who is disposed to embrace what is not really warranted. A temperate fact-finder does not rush to judgment, but rather carefully examines the evidence available and considers how it bears on the hypotheses under consideration. He perseveres in following a line of thought and does not hastily abandon it whenever some unanticipated mental effort is required. A juror possessing these virtues takes due care in accepting hypotheses on the basis of evidence alone and avoids being carried away by reckless impulses and unfounded ideas about what the facts should be.

Finally, the virtues of *intellectual courage* include, most importantly, the willingness to conceive and examine alternatives to well-entrenched beliefs, perseverance in the face of opposition, and courage to face and answer criticism from others. A juror should be willing to consider views which challenge even his most deeply held beliefs – unlike Michael in the example above, who was incapable of even entertaining the hypothesis that the police might have framed the defendant. In jury deliberation, it is crucial that jurors be firm in their convictions and not waver in the face of opposition. At the same time, jurors ought to have the courage to open their views to critical scrutiny and consider the possibility that they might be mistaken. The intellectually courageous fact-finder exhibits thus a proper blend of intellectual autonomy and intellectual humility.

To sum up, an epistemically responsible juror avoids the vices of prejudice, precipitation, and cowardice. Such a juror shows a fundamental respect for truth, which is the core of epistemic responsibility.[11] In law, however, there is an additional constraint on epistemic responsibility over and above the basic concern for truth that should guide epistemic affairs outside the courtroom. Legal fact-finders, by virtue of their role, are expected to conduct inquiry and deliberation within the limits imposed by the institutional context. Rules of evidence and procedure importantly shape the activities of inquiry and deliberation in forensic contexts. When reasoning about facts, legal fact-finders should give due weight to the standards of proof, they ought to respect mandatory presumptions, ignore knowledge of inadmissible evidence, comply with partial admissibility rules, and so on. It is this dual respect for truth and for the institutions that makes for epistemically responsible legal fact-finding.[12]

My claim is thus that beliefs about the facts under dispute at trial which could arise from a process of coherence-based reasoning conducted by an epistemically responsible fact-finder would be justified. Such a fact-finder possesses the epistemic virtues and is fully responsive to the special demands which the legal system places upon him. Of course, there are traits of character, other than the epistemic virtues discussed above, which would greatly help to correctly perform coherence-based reasoning in the context of fact-finding. For example, memory is an extremely important tool for coherence-based reasoning, for the ability to make

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

things cohere depends, to a large extent, on the ability to make connections and bring relevant arguments to bear on the evidential problem at hand, and memory is of great assistance to this process (Samet & Schank 1984, 57). And imagination and creativity importantly facilitate the thinking up of coherent explanations, which is crucial to legal inquiry. However, the use of these abilities is not required for epistemically responsible behavior, as these are not excellences whose exercise is subject to our control. Justification is thus, in this view, inextricably linked with standards of responsibility. It is, in short, the product of the effort of a fact-finder who strives to make sense of the mass of evidence at trial in an epistemically responsible way.

5. TOWARD A RESPONSIBILIST LEGAL EPISTEMOLOGY

In the previous sections, I have argued that *coherentism* is a promising account of the justification of evidentiary judgments in law provided that it is wedded to *responsibilism*. Thus, a notion of epistemic responsibility is a crucial component of a coherentist legal epistemology. Let me conclude by noting some implications of this coherentist *cum* responsibilist approach to the justification of evidence judgments in law.

First, I have argued that the standards of epistemic responsibility that govern legal decision-making may be best spelled out in aretaic terms. It follows from this view that a theory of virtue is an important part of a legal epistemology. The account proposed endorses a version of virtue epistemology according to which a necessary condition for the justification of a belief is that it could have its source in virtue; the other condition being a condition of coherence. On this view, there is a constraint of epistemic virtue on coherentist justification in forensic contexts. However, there are other roles for epistemic virtue to play in a legal epistemology. One could endorse a stronger theory of virtue which dispenses with the coherence condition and explain all there is to the justification of evidence judgments in law in virtue terms. Or one may put forward a weaker theory of virtue that says only that what a virtuous trier of fact would believe is the best 'criterion' for determining which legal decisions are justified, rather than a condition that is partly constitutive of what makes a decision about the facts under dispute justified.[13] I hope that what I say about epistemic virtue in this paper might be of interest to people attracted to other possible versions of a theory of epistemic virtue for law. But, in any event, the main aim is to push legal epistemology in the direction of virtue epistemology by showing the relevance of virtue to a theory of justified findings of fact.

Secondly, a responsibilist view of the justification of evidentiary judgments in law is associated with a conception of fact-finders as 'active' epistemic agents. Fact-finders are traditionally viewed as mere recipients of the proofs offered at trial – as attentive observers of a game that is to be played by other actors. The 'meter' models of jury decision-making, according to which the juror's state of belief is like a 'mental meter' which continually adjusts as evidence is heard, take

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

this passive view of the role of fact-finders to the extreme (Jackson & Doran 1995, 214). In contrast, a responsibilist approach to legal fact-finding puts the emphasis upon the active nature of the triers of fact. Only if fact-finders are regarded as active cognitive agents, can judgments of epistemic responsibility be made.[14] A responsibilist legal epistemology is thus congenial to a view which allows fact-finders to play a more active role in the process than is generally the case in most jury systems.[15]

Thirdly, and closely related to the previous point, a responsibilist legal epistemology suggests an emphasis on the activities of inquiry and deliberation from which, if responsibly made, justified belief results.[16] This focus gives rise to a host of questions about the nature and role of rules of evidence in the fact-finding process. Do current rules of evidence hinder or promote the epistemically responsible analysis of evidence? Do rules of exclusion aid epistemically responsible inquiry or, to the contrary, are they an obstacle to it? Notice that if, upon examination, some of the current rules of evidence are shown to be a hindrance to epistemic responsible behavior, this by itself does not provide an argument in favor of an anti-nomian thesis *à la* Bentham. Rather, it would suggest the need to look beyond current evidentiary rules and consider possible ways in which the law of evidence may regulate and structure jurors' investigations into the facts and jury deliberation so as to facilitate that these activities be carried out in an epistemically responsible way.

Fourthly, focusing upon the activities of legal inquiry and deliberation and placing a notion of responsibility at the center of a theory of the justification of evidence judgments invites us to explore possible analogies and connections between epistemic and ethical evaluations in the context of legal decision-making. Legal fact-finders face special epistemic demands because of the gravity of the consequences of their being wrong. The courtroom is surely a context in which special reasons for being epistemically responsible present themselves.[17] Since, in forensic contexts, belief is so intimately connected to actions which have the potential to seriously affect others, epistemically responsible behavior has an important moral dimension. The relevance of judgments of epistemic responsibility for the beliefs about the facts at trial to the moral responsibility for the consequences of the verdict prompts us to consider the ways in which the epistemic and the ethical may be intertwined in legal decision-making. Are the epistemic responsibilities of legal fact-finders thoroughly epistemic or do they also have a moral dimension? Does epistemically responsible fact-finding require engaging distinctive moral faculties? How do the epistemic and moral duties of legal fact-finders relate to each other? And what is the relationship between epistemically virtuous behavior in legal inquiry and deliberation and morally virtuous conduct? A responsibilist approach to factual adjudication thus draws attention to issues concerning the practical relevance of evidence judgments and brings to light the extent to which ethical considerations are at much at home in a theory of

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

justification of conclusions about disputed questions of fact as they are in a theory of justification of conclusions about disputed questions of law.

Finally, the proposed picture of the justification of evidentiary judgments in law has some implications as far as the aims of education are concerned. It follows from this account that a main objective of legal education should be the improvement of the various kinds of abilities that distinguish good epistemic behavior. More specifically, a teaching program that fosters the development of good epistemic character seems essential to the education of a jurist. Insofar as fact-finding is, to a large extent, in the hands of lay people, these remarks about legal education equally apply to general education.[18] It is crucial for a properly working jury system that the curriculum be designed so as to develop the right kind of epistemic attitudes. The development of the intellectual virtues is not merely a bonus in a system of education, but rather a necessary means to citizens' responsible participation in the administration of justice.

REFERENCES

Allen, Ronald. 1997. "Rationality, Algorithms, and Juridical Proof." *International Journal of Evidence and Proof* 1: 254–75.

Amaya, Amalia. 2009. Forthcoming. "Inference to the Best Legal Explanation." In H. Kaptein, H. Prakken, & B. Verheij (eds.), *Legal Evidence and Proof: Statistics, Stories, Logic*. Aldershot: Ashgate Publishing.

Audi, Robert. 2001. "Epistemic Virtue and Justified Belief." In A. Fairweather & L. Zagzebski (eds.), *Virtue Epistemology: Essays on Epistemic Virtue and Responsibility*, pp. 82–97. Oxford: Oxford University Press.

BonJour, Laurence. 1985. *The Structure of Empirical Knowledge*. Cambridge, MA: Harvard University Press.

Code, Lorraine. 1987. *Epistemic Responsibility*. Hanover, NH: University Press of New England.

Conte, Maria Elisabeth. 1989. "Coherence in Interpretation." In W. Heydrich et al. (eds.), *Connexity and Coherence: Analysis of Text and Discourse*, pp. 275–82. Berlin: DeGruyter.

Damaška, Mirjan. 1997. *Evidence Law Adrift*. New Haven, CT: Yale University Press.

Dworkin, Ronald. 1986. *Law's Empire*. London: Fontana.

Feldman, Richard. 2002. "Epistemological Duties." In P. K. Moser (ed.), *The Oxford Handbook of Epistemology*, pp. 362–84. Oxford: Oxford University Press.

Forster, Edward Morgan. 2000. *Howards End*. London: Penguin Books.

Greco, John. 2001. "Virtues and Rules in Epistemology." In A. Fairweather & L. Zagzebski (eds.), *Virtue Epistemology: Essays on Epistemic Virtue and Responsibility*, pp. 117–41. Oxford: Oxford University Press.

Greco, John. 2002. "Virtues in Epistemology." In P. K. Moser (ed.), *The Oxford Handbook of Epistemology*, pp. 287–315. Oxford: Oxford University Press.

Harman, Gilbert. 1986. *Change in View: Principles of Reasoning*. Cambridge, MA: MIT Press.

Hastie, Reid & Nancy Pennington. 1991. "A Cognitive Theory of Juror Decision-Making: The Story Model." *Cardozo Law Review* 13: 519–57.

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

Hookway, Christopher. 2003. "How to Be a Virtue Epistemologist." In M. DePaul & L. Zagzebski (eds.), *Intellectual Virtue: Perspectives from Ethics and Epistemology*, pp. 183–202. Oxford: Clarendon Press.

Jackson, Bernard. 1988. *Law, Fact, and Narrative Coherence*. Merseyside: Deborah Charles Publications.

Jackson, John & Sean Doran. 1995. *Judge without Jury: Diplock Trials in the Adversary System*. Oxford: Clarendon Press.

Lehrer, Keith. 2000. *Theory of Knowledge*. 2nd ed. Boulder: Westview Press.

Lipton, Peter. 2004. *Inference to the Best Explanation*. 2nd ed. London: Routledge.

Lycan, William. 1988. *Judgment and Justification*. Cambridge: Cambridge University Press.

Lycan, William. 1996. "Plantinga and Coherentisms." In J. L. Kvanvig (ed.), *Warrant and Contemporary Epistemology: Essays in Honor of Plantinga's Theory of Knowledge*, pp. 3–23. Lanham, MD: Rowman & Littlefield.

MacCormick, Neil. 2005. *Rhetoric and the Rule of Law: A Theory of Legal Reasoning*. Oxford: Oxford University Press.

Montmarquet, James. 1993. *Epistemic Virtue and Doxastic Responsibility*. Lanham, MD: Rowman & Littlefield.

Moravcsik, Julius. 1990. *Thought and Language*. London: Routledge.

Paul, Richard. 2000. "Critical Thinking, Moral Integrity and Citizenship: Teaching for the Intellectual Virtues." In G. Axtell (ed.), *Knowledge, Belief, and Character: Readings in Virtue Epistemology*, pp. 163–75. Lanham, MD: Rowman and Littlefield.

Plantinga, Alvin. 1993. *Warrant: The Current Debate*. New York: Oxford University Press.

Samet, Jerry & Roger Schank. 1984. "Coherence and Connectivity." *Linguistics and Philosophy* 7: 57–82.

Simon, Dan. 1998. "A Psychological Model of Judicial Decision-Making." *Rutgers Law Journal* 30: 1–142.

Simon, Dan. 2004. "A Third View of the Black Box: Cognitive Coherence in Legal Decision-Making." *The University of Chicago Law Review* 71: 511–86.

Thagard, Paul. 2000. *Coherence in Thought and Action*. Cambridge, MA: MIT Press.

Zagzebski, Linda. 1996. *Virtues of the Mind*. Cambridge: Cambridge University Press.

Ziff, Paul. 1984. "Coherence." *Linguistics and Philosophy* 7: 31–42.

NOTES

1 See BonJour (1985) and Lehrer (2000). BonJour's theory is not a 'pure' theory of coherence, for he takes coherence to be a necessary albeit insufficient condition of justification. In contrast, according to Lehrer's theory, coherence is both a necessary and sufficient condition of justification. What sets these theories apart from the traditional foundationalist accounts of justification is that they deny that there exists a set of beliefs possessing any sort of justification that is independent from coherence. It is the rejection of this claim, rather than the idea that coherence is the sole basis for justification, that characterizes coherence theories of justification.

2 Some commentary may be helpful here. First, the coherence theory of the justification of evidentiary judgments in law is meant to provide an account of the conditions under which beliefs about the events being litigated are justified, rather than an account of

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

the conditions under which a trier of fact is justified in accepting these beliefs. In this respect, it differs from coherence theories of epistemic justification, which usually focus on whether a particular person is justified in light of the beliefs she holds. Second, the evidence at trial provides the starting point for coherence-based reasoning about the events being litigated. This, I would argue, does not introduce a foundationalist element in the theory, as the justification of propositions describing the evidence at trial, like the justification of hypotheses about the events being litigated, ultimately depends on their relations of coherence.

3 In order to apply Thagard's theory of explanatory coherence to the legal context, it is necessary to introduce some modifications. More specifically, there is an important institutional dimension to the explanatory evaluation of hypotheses in law, and this gives rise to additional institutional constraints. See Amaya (2009).

4 To be sure, the relation between coherence and truth is highly problematical. However, there are some strategies for connecting up coherence with truth which make a plausible case for the truth-conduciveness of coherence (BonJour 1985, Lehrer 2000, and Thagard 2000).

5 It is important to note that the proposed account of justification is counterfactual, in that it makes the justification of a belief about the events being litigated depend on whether it could have been accepted as justified by an epistemically responsible fact-finder, rather than on the actual causal history of the belief. The latter would be relevant for assessing whether a fact-finder is justified in accepting a belief about the facts under dispute, but not to the determination of the justificatory status of the belief.

6 The possibilities for jurors to actively participate in obtaining evidence are quite limited in most legal systems. While evidence-gathering is primarily in the hands of the parties in common law systems, trial judges may nevertheless intervene in proof-taking activities. And, in some jurisdictions, jurors have a right to pose questions to witnesses. In continental systems, both judges and jurors are free to intervene in the development of evidence. For a comparative analysis of the different roles that fact-finders perform in the proof-taking process, see Damaška (1997, 88–94).

7 The most influential statements of virtue responsibilism include Code (1987) and Montmarquet (1993). Both Code and Montmarquet argue for a closer affinity between virtue epistemology and Aristotle's theory of the moral virtues. The most detailed and systematic defense of a Neo-Aristotelian virtue theory is provided by Zagzebski (1996).

8 It is thus the responsibilist version of virtue epistemology, rather than the reliabilist version, that is useful for the purposes of analyzing what epistemic responsibility requires in legal contexts. This leaves open the question of the relative merits of both kinds of virtue epistemology.

9 For an argument to the effect that virtue theories in epistemology hold an advantage over deontological theories because the former do not need to understand epistemic justification in terms of epistemic rules or norms, see Greco (2001). Zagzebski also argues that a reason for preferring a virtue approach to epistemology is that being in an epistemically positive state is not strictly rule governed. See Zagzebski (1996, 21).

10 Audi has argued that a valuable feature of virtue epistemology is that it focuses attention on what counts as admirable. See Audi (2001, 95). And Zagzebski has claimed that an important advantage of virtue ethics is that it understands the moral life in terms of

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press

aiming at moral praiseworthiness rather than avoiding epistemic blame. See Zagzebski (1996, 28, 253).

11 Code writes: "... to be a good knower is to have a fundamental respect for truth" (1987, 161). Intellectual virtue, argues Code, has a 'realist' orientation: "it is only those who, in their knowing strive to do justice to the *object* – to the *world* they want to know as well as possible – who can aspire to intellectual virtue" (58).

12 One may say that epistemically responsible legal fact-finders are expected to carry out their activities of inquiry and deliberation from an 'internal point of view,' that is, from the point of view of someone who endorses the rules that structure legal fact-finding and is disposed to guide her conduct in accordance to them.

13 Zagzebski distinguishes between 'weak' virtue theories, which say that what a virtuous person would do is the best criterion for what is right, and 'pure' virtue theories (which I have labeled 'strong' virtue theories in the main text) according to which an act is right because it is what a virtuous person might do (1996, 16).

14 An interest in the virtues as they relate to active agency is an important theme of Code (1987).

15 On the need to assign a more active role to triers of fact, see Damaška (1997), especially ch. 4.

16 A version of virtue epistemology that situates the activities of inquiry and deliberation at the center of the epistemological project is Hookway's. See Hookway (2003).

17 Montmarquet has argued that a constant state of alertness or exertion of effort is not required by epistemic responsibility; rather what is required is a readiness to respond in an appropriate, virtuous way whenever there are special reasons for being conscientious. Such reasons, he argues, may be various, but typically these relate to the practical consequences of one being wrong (1993, ch. 4). Surely, the courtroom environment is such that such special reasons for care present themselves.

18 Paul has argued for the relevance of having curricula that foster the intellectual virtues to moral integrity and citizenship in his (2000).

Amalia Amaya received her Ph.D. from the European University Institute in 2006 and an LL.M and a S.J.D. from Harvard Law School in 2007. She joined the Institute for Philosophical Research at the National Autonomous University of Mexico in 2008. Her research interests are in the philosophy of law and ethics. She is currently working on a book on the role of coherence in legal reasoning, which will be published by Hart Publishing.

https://doi.org/10.3366/E1742360008000415 Published online by Cambridge University Press