Chapter 13
Ten Theses on Coherence in Law

Amalia Amaya

The aim of this chapter is to advance the following theses: (1) The concept of coherence in law may be best understood in terms of constraint satisfaction; (2) Coherence-based inference is an explanatory kind of inference; (3) There are three main operations whereby coherence may be built in the course of legal decision-making: subtraction, addition, and re-interpretation; (4) Epistemic responsibility is a pivotal component in a theory of legal coherence; (5) Coherentist standards of legal justification vary with context; (6) Coherence-based legal reasoning is a variety of reasoning about ends; (7) There are three main reasons why coherence is a value worth pursuing in law: epistemic reasons, practical reasons, and constitutive reasons; (8) The main motivation of legal coherentism is to provide a non-skeptical alternative to formalism; (9) The coherence theory of legal justification is psychologically plausible and this provides an argument in favor of this theory; (10) Legal coherentism is an agent-centered theory of justification. In what follows, I shall discuss in some detail each of these theses.[1]

A. Amaya (✉)
National Autonomous University of Mexico, Institute for Philosophical Research, Circuito Mario de la Cueva s/n, 4510 Ciudad Universitaria, Coyocan, Mexico
e-mail: amaya@filosoficas.unma.mx

13.1 Legal Coherence as Constraint Satisfaction

The concept of coherence is a very slippery one. In the last decades, theories of coherence have been proposed in different domains, such as ethics,[2] epistemology,[3] the literature on practical reasoning,[4] discourse theory,[5] philosophy of language,[6] and philosophy of law.[7] These theories advance different views about how to determine when a set of elements, i.e., norms, discourses, works of art, theories, beliefs, etc. is coherent. Among the different concepts of coherence that have been defended in the literature, I find Paul Thagard's constraint satisfaction approach to coherence particularly interesting (Thagard 2000). This approach—and this is my first thesis—is extremely useful for defining the kind of coherence that is relevant for the justification of both normative and factual statements in law.

According to Thagard, the coherence of a set of elements is a matter of the satisfaction of a number of positive and negative constraints. These constraints establish relations of coherence—positive constraints—and incoherence—negative constraints—among the elements of a set. A coherence problem consists in dividing a set of elements into accepted and rejected in a way that maximizes the satisfaction of the constraints. A positive constraint between two elements can be satisfied either by accepting both of the elements or by rejecting both of them. A negative constraint between two elements can be satisfied only by accepting one element and rejecting the other. Thus, the idea is that we turn a set of elements into as coherent a whole as possible by taking into account the coherence and incoherence relations that hold between pairs of elements of this set.

This abstract characterization of coherence applies to a wide variety of problems. In order to apply this theory to a particular domain, it is necessary to specify the elements and relevant constraints. Thagard distinguishes six kinds of coherence: explanatory, analogical, deductive, perceptual, conceptual, and deliberative. Each kind requires different sorts of elements and constraints. Thagard has proposed theories for all these six kinds of coherence, which specify the relevant positive and negative constraints. For example, according to the principles of explanatory coherence, explanatory coherence is a symmetrical relation between hypotheses and evidence within a set; it arises out of relations of explanation and analogical relations between evidence and hypotheses; relations of contradiction and competition give rise to incoherence; and the acceptability of a proposition is claimed to be a matter

---

[2] On coherence theories of moral justification, see Rawls (1999), Goldman (1988), DePaul (1993), and Thagard (1998).

[3] See BonJour (1985) and Lehrer (2000).

[4] See Richardson (1994), Hurley (1989), and Thagard and Millgram (1996).

[5] For a review of the current state of coherentist approaches to discourse interpretation, see Hellman (1995).

[6] See Davidson (2001). See also Fodor and Lepore (1992).

[7] See, among others, MacCormick (1984), Dworkin (1986), Peczenik (1989), Aarnio (1998), and Hage (2004).

of its coherence with the rest of propositions within a set, some of which enjoy, nonetheless, a degree of acceptability on their own. According to Thagard, the solution of a particular coherence problem involves the interaction of different kinds of coherence. For instance, epistemic justification requires the interaction of deductive, explanatory, analogical, perceptual, and conceptual coherence.

The theory of coherence as constraint satisfaction, I would argue, may be successfully applied to give an account of legal coherence. Two kinds of legal coherence may be distinguished: factual coherence, i.e., the kind of coherence that is relevant to the justification of conclusions about disputed questions of fact in law, and normative coherence, i.e., the kind of coherence that is relevant to the justification of normative conclusions in law. More specifically, the suggestion is that one may develop a concept of coherence for the justification of conclusions about disputed questions of fact on the basis of Thagard's model of epistemic coherence, and a theory of coherence for the justification of conclusions about disputed questions of law on the basis of Thagard's theory of ethical coherence. Nonetheless, some modifications are necessary to take into account domain-specific features of legal reasoning.

Factual coherence results from the interaction of the same kinds of coherence that are relevant to epistemic justification with one major addition, namely, deliberative coherence. This kind of coherence is relevant to the justification of factual judgments in law given that there is an important practical dimension to epistemic reasoning in law. Explanatory coherence is the most important kind of coherence in a theory of the justification of evidentiary judgments in law. In addition to the positive and negative constraints established by the principles of explanatory coherence, it is necessary to add some constraints to account for the fact that the evaluation of explanatory hypotheses in law takes place within a highly institutionalized context. More specifically, the presumption of innocence may be treated as a constraint that requires that hypotheses compatible with innocence be given priority in being accepted and the reasonable doubt standard requires that the guilt hypothesis be accepted only if its degree of justification is sufficiently high to meet this standard.

Normative coherence requires the interaction of the same kinds of coherence that are relevant to moral justification plus another kind of coherence, namely, 'interpretative' coherence. This kind of coherence is necessary to give an account of the interpretative nature of legal argument. The principles of interpretative coherence are structurally analogous to the principles of explanatory coherence, except that positive and negative constraints hold between interpretative hypotheses and normative elements (i.e., precedents, principles, rules, etc.) rather than between factual hypotheses and propositions describing observations. Just as explanatory coherence is the most important contributor to the justification of factual judgments in law, so is interpretative coherence particularly important for the justification of normative judgments in law.

The theory of legal coherence as constraint satisfaction is attractive in that it allows us to formulate a number of criteria of coherence and thereby helps us overcome one of the main problems facing coherence theories in law, to wit, that

they lack a precise account of the criteria of coherence and of how they should be balanced against each other. In addition, this theory provides us with the resources to give a unitary account of the role that coherence plays in the justification of both factual and normative judgments in law. This is not to say that this theory is without problems. To start with, the theory of coherence as constraint satisfaction does not give an account of the problem of how the set of elements over which the coherence calculation proceeds is generated, i.e., the problem of the input. Besides, it is also unclear how one may integrate the different kinds of coherence in order to give a solution to a legal problem, i.e., the problem of integration. Notwithstanding these problems, this theory provides a useful framework for developing a coherentist account of legal justification.

13.2 The Explanatory Nature of Coherence-Driven Inference

An important problem that any coherence theory of justification faces is that of giving an account of the process whereby one reaches the most coherent interpretation of a legal rule, the course of action that best fits with a set of values and objectives, the hypothesis about the disputed facts that best makes sense of the evidence available, or the scientific theory that best coheres with a body of observations. It cannot be explained—it might be argued—how a judge reaches the most coherent solution to a legal problem or what makes an interpretation of a work of art more coherent than another one is: these issues are but a matter of intuition. As Putnam put it, coherence, like jokes, "are not something we have an algorithm for, but something that we ultimately judge by 'seat on the pants' feel" (Putnam 1985, 132–133). But if this is so, then coherence theories are at a distinct disadvantage compared with alternative theories of justification that have the resources to give an account of the reasoning patterns that result in justified beliefs. Moreover, the purported lack of a theory of coherence-driven inference makes coherentism a non-starter as a theory of legal justification, for in public contexts, such as the legal one, it is imperative that decisions be backed by reasons rather than be the result of mere intuition. As opposed to theories of adjudication that rely on a clear description of the legitimate patterns of inference, e.g., the judicial syllogism, and theories of evidential reasoning in law that employ the resources of inductive logic, e.g., the Bayesian theory of legal proof, coherentism seems to lack any theory about how arguments from coherence work.

My claim is that coherentism, to the contrary, does have a clear description of the inferential processes that yield justified beliefs. Coherence-driven inference is a kind of explanatory inference. Therefore, we have the tools of abductive logic to give an account of the kind of inferences which, according to coherentism, confer justification. Coherence-based inference—and this is my second thesis—may be described as an 'inference to the best explanation', i.e., the most coherent

explanation.[8] An inference to the best explanation in law consists of three main stages: (1) the generation or discovery of relevant elements—factual hypotheses and evidence, in the case of evidential reasoning, and interpretative hypotheses and normative elements, in the case of normative reasoning; (2) the pursuit, development, and refinement of a number of initially plausible decision alternatives; and (3) the evaluation and comparison of these decision alternatives with a view to selecting one of them as justified. Thus, an inference to the best explanation does not only work in the context of discovery, but it may also confer justification to its conclusions—because of its coherence-enhancing role—and it plays an important role not only in evidential reasoning in law but also in legal reasoning about normative questions.[9]

Inference to the best explanation leads us to accept as justified a hypothesis about the facts or the law that is most coherent among those that have been considered. Hence, this pattern of inference is first and foremost a process of coherence maximization. In the first stage, i.e., generation, coherence helps us narrow down the set of plausible hypotheses; hypotheses that blatantly incohere with background knowledge about the world and the law are excluded from consideration. Coherence also helps us generate new elements; the search for coherence stimulates asking questions which importantly aid the aim of inquiry. Asking what interpretative hypothesis could make sense of a body of precedents or what evidence would cohere with a given factual hypothesis is an effective way of identifying relevant hypotheses and evidence. The second stage, i.e., pursuit, in which each hypothesis is rendered as coherent as it can be, is critical to ensure that there is a fair evaluation of the alternatives. A number of coherence-making mechanisms—which I shall discuss in the next section—allow one to improve the alternative hypotheses about the facts and the law, prior to evaluating them. Last, at the third stage, coherence provides us with a set of criteria for comparing the decision alternatives so as to select one of them as justified.

Thus, coherence is not a question of intuition that cannot be subjected to critical analysis but the result of a process one may describe in detail by using explanatory reasoning. May coherentist reasoning be formalized? If coherence-based reasoning, as I have argued, is explanatory in nature, then it is highly unlikely that it may be formalized by means of traditional logical tools, given that explanatory relations cannot be reduced to syntactic or semantic relations, but pragmatic elements play a critical role in the generation and evaluation of explanatory hypotheses, and, thus, in judgments of coherence. Connectionist algorithms—such as those employed, for instance, by Thagard, computational models—like those used in studies on abduction in artificial intelligence, or belief revision formalisms—which we will examine shortly—are more appropriate to formalize the complex argumentative

---

[8]The literature on inference to the best explanation is extensive. The most detailed defense of a model of inference to the best explanation is Lipton's. See Lipton (2004).

[9]For a discussion of the role of inference to the best explanation in legal reasoning about facts, see Amaya (2009).

networks on which judgments of coherence depend. However, these formalisms, like any formalization, only have the resources to give an account of some aspects of coherence-based reasoning. Despite their limitations, they provide us with useful tools for better understanding the mechanics of coherence-driven inference.

13.3 Coherence-Making Mechanisms

How may one render an incoherent set of elements into a coherent one? Which mechanisms may be used to maximize the degree of coherence of an interpretative or factual hypothesis? As I said before, before evaluating the alternative decisions, it is necessary to improve and refine each of the hypotheses under consideration. Now, I would like to make a proposal as to how one may modify an alternative decision so as to make it as coherent as it can be. There are, I would argue, three coherence-making strategies, namely, subtraction, addition, and reinterpretation.[10]

Subtraction, which consists in eliminating some elements, is a well-known coherence-making operation. This operation is rather useful when reasoning about facts in law. For example, faced with contradictory testimony, a fact-finder may reach coherence by eliminating a belief in the credibility of one of the witnesses on the grounds that it conflicts with a hypothesis that is well supported by the available body of circumstantial evidence. Subtraction is also helpful for enhancing coherence when reasoning about norms in law. For instance, one may increase the coherence of an interpretative hypothesis that explains an important body of precedent and other relevant norms by ruling out as mistaken a precedent that is inconsistent with the principles underwriting such an interpretation.

Coherence may also be built by adding new elements. This strategy, which is perhaps less familiar, is also very useful in the context of legal reasoning (Klein and Warfield 1994). For instance, suppose that a legal decision-maker believes that the evidence at trial strongly supports a guilt-hypothesis. However, suppose that she also believes an expert testimony that conflicts with the hypothesis of guilt. There emerge, however, in the course of the trial, reasons for doubting the reliability of the method used by the expert. A fact-finder may increase the coherence of the theory of the case entailing the guilt of the accused by adding the belief that the expert testimony is not reliable. One may also use addition to enhance coherence when reasoning about normative issues. For example, one may increase the coherence of an interpretative hypothesis by adding a belief in an overarching principle that irons out the discrepancies between the proposed hypothesis and a relevant body of precedents.

---

[10]The taxonomy and definition of these operations is based on the operations distinguished in the belief revision literature. For an introduction to these formalisms, see Gärdenfors (1988). For a coherentist interpretation of these operations, see Olsson (1988). For applications of belief revision formalisms to law, see Amaya (2007).

Last, coherence may also be enhanced by a "reinterpretation" strategy, which amounts to eliminating one belief and replacing it by another.[11] For instance, incriminating physical evidence found in the house of the accused can be re-interpreted, in light of evidence of police misconduct, as decreasing rather than enhancing the coherence of the theory of the case entailing guilt. Similarly, one may re-interpret a body of precedent, which incoheres with a proposed interpretative hypothesis, in the light of an alternative principle so as to augment (rather than reduce) its degree of coherence.

These coherence-making mechanisms, i.e., subtraction, addition, and reinter-pretation, enjoy a high degree of psychological plausibility. Holyoak, Simon, and collaborators have shown that legal decision-making is a process whereby decision-makers reconstruct the mental representation of the decision task so as to achieve a state of coherence at which the considerations that support the emerging decision are strongly endorsed and those that support the alternative decision are dismissed. Operations of addition, elimination, and modification of dissonant elements are pivotal, as these studies have shown, to reach a coherent representation of the decision problem.[12]

Now, if the production of coherence is at the core of decision-making and, more generally—as I will argue later—a constitutive part of human information processing then, there is a legitimate question as to whether the coherence built in the course of legal decision-making is either genuine or merely the product of an unconstrained tendency to construct coherence. For example, faced with a number of interpretative or factual hypotheses, legal decision-makers, in their effort after coherence, may manipulate the decision elements so as to secure that their preferred alternative is, by the end of the process, the most coherent one. Or they may ignore or underplay the relevance of disturbing evidence in order to preserve the coherence of their favored hypothesis. Thus, there is an important risk involved in coherence-based reasoning, namely, that of 'fabricating' coherence where there is none. In order to block ascriptions of justification to factual or interpretative hypotheses the coherence of which is the result of a defective process of belief formation, it is necessary to impose some limits to coherence building. It is possible—and this is my fourth thesis—to constrain the kind of coherence that generates justification by inserting a theory of epistemic responsibility within a coherence theory of justification. I turn now to discussing the relevance of judgments of epistemic responsibility to judgments of coherence and, thus, to legal justification.

---

[11]The term 'reinterpretation' is Conte's. See Conte (1988).

[12]For a summary of experimental results, see Simon (2004).

13.4 Coherence, Responsibility, and Virtue

Standards of epistemic responsibility are an essential element of a coherence theory of justification.[13] We humans have an outstanding ability to make sense of the world. Although individuals vary in 'mental agility', i.e., their tolerance for inconsistency, the ability and tendency to construe coherence is a critical feature of human cognition.[14] But then the following problem arises: how can we tell apart the kind of coherence that yields justification from the coherence that is the result of an unrestrained propensity to fabricate coherence? In other words, how may one distinguish the kind of coherence that is the result of prejudice, fantasy, or bias and that which results from our best efforts to achieve, as Rawls would put it, a reflective equilibrium among our beliefs, accepted background theories, and a set of relevant principles? In the legal context, this problem is also a serious one, for we do not want to attribute justification to beliefs about the law whose putative coherence is the result of personal adherence to moral principles that are unsupported by the relevant legal materials. Neither do we want to confer justification to beliefs about the facts under dispute the coherence of which results from systematic efforts at interpreting evidence so that it fits with a set of deeply entrenched but unwarranted beliefs (e.g., beliefs about the propensity of some racial groups to commit violent acts or the lack of honesty in some professions). Thus, it is necessary to determine the kind of coherence that generates justification so as to rule out as unjustified interpretative and factual hypotheses that, albeit coherent, are the result of defective processes of belief formation.

   My proposal is as follows: a hypothesis about the facts or the law is justified if it could be the outcome of epistemically responsible coherence-based reasoning. The (interpretative or factual) hypothesis that an epistemically responsible legal decision-maker could have accepted as justified enjoys what I shall refer to as 'optimal coherence.' Thus, my suggestion is that legal justification is a matter of optimal coherence. For one to be justified in accepting a belief, an interpretation, a course of action, etc. by virtue of its coherence in the legal context, it is necessary to generate a number of alternatives and select the most coherent one in an epistemically responsible manner. That is to say, that an alternative decision is the most coherent one only gives one a reason to accept it as justified if one has carefully considered the relevant alternatives in the particular context and has evaluated their coherence in an epistemically responsible way. It is critical to note that a decision may be justified even if it is the outcome of an irresponsible process of coherence maximization, as long as an epistemically responsible legal decision-maker *could* have accepted it as justified by virtue of its coherence. Thus, the justification of a

---

[13]On the relationship between responsibility and epistemic responsibility, see Pryor (2001).

[14]The term is Festinger's. See Simon (1998, 549, 15 ff.).

decision depends on a counterfactual condition, not on a causal one. In contrast, a legal decision-maker is justified in taking a decision if the actual process of decision-making has been conducted in an epistemically responsible way.

Now, what is it for a legal decision-maker to behave in an epistemically responsible way? Two main accounts of epistemic responsibility may be distinguished: a 'deontic' approach and an 'aretaic' approach. Under a deontic-approach, epistemic responsibility is a matter of duty-fulfillment. One is epistemically responsible to the extent that one complies with one's epistemological duties, such as the duty to believe as evidence dictates or the duty to seek out more evidence about propositions which are less than certain on one's evidence.[15] According to the aretaic conception of epistemic responsibility, one is epistemically responsible insofar as one properly exercises a number of intellectual virtues, such as diligence, courage to face criticism, perseverance in following a line of inquiry, or open-mindedness.[16]

Perhaps, there is no need to choose among these alternatives. One could develop an irenic approach to the epistemic responsibility of legal decision-makers, which combines deontic and aretaic elements. On this view, legal deliberation about both the facts and the law requires compliance with certain epistemological duties as well as the exercise a number of intellectual virtues. I have defended such an approach elsewhere; however, I am not fully persuaded that this is a satisfactory theoretical position, as it puts together elements of very different philosophical traditions. In principle, given that the law aims at establishing standards of conduct that are minimally acceptable, rather than ideal models of conduct, a deontic approach seems adequate. However, there are some reasons why, I would argue, an aretaic approach may be preferable.[17] Virtue concepts have the advantage of greater richness than deontic concepts; a virtue approach does not reduce good epistemic practice to rule-following; and it allows us to put forward an ideal of legal agent according to which legal decision-makers do not merely aspire to avoid prohibited epistemic conduct, but to engage in epistemically valuable conduct. Nonetheless, I leave open the issue of which is the best way of defining standards of epistemic responsibility in the context of legal decision-making. The important point that I would like to emphasize is the need to complement a theory of coherence with a theory of epistemic responsibility—however it may be developed—in order to give a satisfactory account of legal justification.

---

[15]On epistemic duties, see Feldman (2002).

[16]The literature on epistemic virtues is extensive. The most influential version of virtue epistemology among those that take virtues to be character traits is Zagzebski (1996).

[17]For a defense of an aretaic approach to the epistemic responsibility of triers of fact—judges in their fact finding capacities as well as members of the jury—see Amaya (2008).

13.5   Coherence and Context

Context is essential when evaluating the coherence or incoherence of an interpretation, an action, a plan, or a theory. The process whereby coherence is constructed is, first and foremost, a process of contextualization. Margolis writes, "Context is the clue, however. Faced with an apparently non-coherent (not obviously coherent or incoherent) array of human thought and behavior or work, we search for a plausible or likely context of human purposes within which a given set of dreams, thoughts, plans, endeavors, theories, stories, paintings, statements, utterances, fears, commitments, hopes, or the like may be shown to be relevantly coherent or incoherent" (Margolis 1984, 23). Hence, the search for coherence is a search for a context in which one may make sense of a set of apparently incoherent elements. It is only when we have failed to make sense of a set of norms, propositions, etc. in light of a plausible set of interests, objectives, or beliefs that we abandon the presumption of coherence that governs processes of interpretation and make a judgment of incoherence.[18] In this sense, judgments of coherence are 'perspectival,' that is to say, a behavior, a hypothesis, or a discourse are coherent or incoherent relative to a point of view, a body of beliefs, or assumptions. However, and this is critical, the context of objectives, beliefs, etc. that is relevant to judgments of coherence is not given, but it is the product of the effort of the interpreter at preserving the presumption of coherence that guides the interpretation process.

A coherence theory of justification has to give an account of the way in which judgments of coherence, and thus, of justification, depend on context. The context-dependence of justification is a basic tenet of contextualism. In both ethics and epistemology, there have been defended several proposals according to which standards of justification vary with context.[19] The coherence theory of legal justification, I would argue, needs to be contextualized. That is to say, the coherentist standards of legal justification are not the same across contexts, but they are subjected to contextual variation. Now, what are the features of context that are relevant for fixing the standards of legal justification? And what is exactly that varies with context? Let us start by considering the first question.

There is no consensus about which features of context are relevant to justification. However, in the literature on contextualism, one may identify some features which, I would argue, play an important role in the justification of factual and normative statements in law.[20] Some of these features are as follows:

1. The stakes. When the costs of being wrong are very high, a stricter standard of justification is in order. For example, in most legal systems, standards of

---

[18]On the presumption of coherence, see Brown and Yule (1983, 234).

[19]See, among others, Annis (1978), Cohen (1986), Lewis (1996), and DeRose (1999). For contextualism about moral justification, see Timmons (1999).

[20]For an interesting proposal about which contextual factors are relevant to justification, see Williams (2001).

justification are higher in criminal cases, which involve serious consequences for the defendant, than in civil cases.

2. The role. Expertise and one's occupation also determine the severity of the standards that are appropriate in a particular context of justification. A higher level of scrutiny is required, for example, for the justification of a Supreme Court decision as opposed to a lower level court decision.

3. There are various goals that might be relevant in a particular context of justification, and relative to which a decision or belief might be properly characterized as justified. For instance, a decision about facts in law may be justified in light of the variety of goals that adjudication is meant to serve, while unjustified relative exclusively to the goal of truth-seeking—as happens in cases in which relevant evidence is rule out as inadmissible.

4. Methodological constraints. Standards of justification vary with the kind of inquiry that one is engage in (epistemological, legal, etc.). What is at stake here, as Williams puts it, is not so much the 'level' of scrutiny as the 'angle' of scrutiny (Williams 2001, 160). We can be more or less strict in setting up our standards of evidence within a particular field of inquiry, but some questions have to be set aside for us to determine whether a particular belief or hypothesis is justified in that specific field. For instance, to reason about facts in law, it is necessary to set aside skeptical hypotheses that would surely be relevant in the context of epistemological inquiry. And to reason about normative questions in law, rather than morals, one has to take the relevance of authority reasons for granted and exclude from consideration hypotheses which, while appealing from a normative standpoint, clearly conflict with the relevant legal sources.

5. The resources. The level of scrutiny that is reasonable in a particular context depends on the resources available. For example, in the context of legal reasoning, there are severe institutional and time constraints which put a limit to the kind of issues that may be considered before one accepts a decision as justified.

6. Dialectical features. Justificatory practices take place in a dialectical context that constrains what may be taken for granted and what, to the contrary, is a relevant alternative that needs to be ruled out for one's claim to be justified. The fact of mentioning or raising a possible defeater triggers a higher level of scrutiny. For example, an expert testimony may not be taken at face value as soon as doubts are raised about the credibility of the expert. Or a legal principle cannot be accepted as justified if its coherence with core constitutional values has been called into question.

The foregoing features—among others, this list is intended to be merely indicative, rather than exhaustive—are relevant to determine the severity of the standards of justification that is appropriate in a particular context. Hence, the question of whether a hypothesis about the facts or the law is justified cannot be addressed in the abstract, but it is necessary to take into account the gravity of the consequences of the legal decision, the institutional role of the decision-maker, the relevant objectives, the resources available, and the methodological and dialectical

constraints characteristic of the particular context. These contextual features allow us to adjust the standards of justification and avoid the use of standards that are either too lax or too demanding.[21] But how—and I turn now to the second question raised above—does context fix the severity of the standards of legal justification?

There are three dimensions along which, I would argue, coherentist standards of justification may be may be lowered or raised: the threshold of justification, i.e., the degree of coherence required for justification, the domain of coherence, i.e., the set of elements the coherence of which is relevant to justification, and the constitution of the contrast set, i.e., the set of hypotheses within which one hypothesis gets justification by being most coherent. First, the degree of coherence that a hypothesis about either the facts or the law should enjoy in order to be justified depends on context. For example, a theory of the case may be coherent enough to justify a finding for the plaintiff in a civil case, even if it falls below the threshold of coherence required to find against the defendant in a criminal case.

Second, the domain of coherence also varies with context. For instance, in order to reach a justified decision in easy cases, it may suffice to seek coherence with, perhaps, a set a precedents and a relevant body of legal rules. However, in hard cases in which decisions carry serious normative consequences for the legal system, it seems necessary to expand the set of relevant reasons in order to make a judgment of coherence with a view to reaching a justified decision.

Last, the set of alternatives that legal decision-makers should take into consideration before picking one of them as justified depends on context as well. For instance, methodological constraints help configure the set of relevant alternatives. While the hypothesis that the defendant did not voluntarily commit the crime because he was, as we all are, deceived by a malign demon, might be relevant in the context of epistemological inquiry, it can be properly ignored in the context of a criminal trial.

To sum up, judgments of coherence (and incoherence) are context-dependent. A coherence theory of justification has to take into account that there is a contextual dimension to coherence judgments. To be sure, the introduction of contextual considerations into a coherence theory of justification makes it more complex and less precise. However, a contextualized version of coherentism has some reasons to recommend it. First, a contextualized approach to coherentism is more plausible from a psychological point of view than holistic versions of coherentism. Contextualized coherentism reduces the complexity of coherence computations insofar as it does not require agents to evaluate the coherence of the whole system of beliefs—factual or normative—but only the subset that is relevant in context. The contextualization of coherentist standards of justification also increases the

---

[21]Now, while the reasons for ensuring that we do not under-consider alternatives are pretty obvious, it may not be immediately clear why one should be concerned with not over-considering alternatives. Given our limited cognitive and institutional resources, as well as time constraints, it is important not to raise the standards of justification, unless there is a reason to do so. As Fogelin says, there are 'epistemic transaction costs' involved in raising a level of scrutiny, which, like most costs, we prefer not to incur. See Fogelin (2003, 123–124).

descriptive power of the theory, for legal decision-makers do not typically bring to bear their whole system of beliefs when solving a legal problem—as traditional, holistic, coherence theories assume—but only those beliefs that are relevant in the particular context. Besides, a contextualist approach to legal justification also has advantages from a normative point of view, in that it puts limits to the use of moral reasons when reasoning about normative issues in law and prevents beliefs based on inadmissible evidence from playing a role in evidential reasoning in law. Thus, the introduction of context in a coherentist theory of legal justification has some important advantages, even if it comes with a price in terms of the degree of precision that one may expect the theory to have.

13.6   Coherence-Based Reasoning and Reasoning About Ends

Coherence-based reasoning is a kind of non-instrumental reasoning. That is to say, coherentist reasoning allows us to reason about which ends are valuable and how to proceed when they come into conflict. According to the instrumental conception of practical reason, all practical reasoning is means-ends reasoning. Instrumentalism is problematic insofar as it places ends and values beyond the pale of reason. On this view, ends and values are fixed by individual preferences and constrain the space of deliberation, rather than being the subject of rational revision. When ends and values come into conflict, one should reduce those values to a common scale, in order to make a rational decision, or take the decision that seems intuitively best. As opposed to this reductive conception of the scope of practical reason, non-instrumental approaches hold it that it is possible to reason not only about what are the best means to achieve one's ends, but also about which ends are worth pursuing in the first place and how to solve conflicts among them.[22] Given that the law is responsive to a plurality of ends and values, legal decision-making often involves facing problems of value conflict. Thus, an instrumentalist conception of practical reason does not have the resources to guide legal decision-makers in their task. Coherentist methods significantly contribute to a better understanding of the patterns of inference whereby legal decision-makers may reason about ends and values in law.

There are several proposals about how coherence works as a standard of justification of practical inferences other than means-ends inferences. I will briefly discuss two proposals that are particularly interesting and, I would argue, useful in the context of law. First, Henry Richardson has developed a coherentist version of specificationism that is rather helpful for addressing problems of normative conflict (Richardson 1994). Some ends, such as 'happiness', a 'good constitution of a political body', etc., are too vague and indefinite to serve as starting points for means-ends reasoning. Specificationism holds that practical reasoning consists,

---

[22]For a brief but informative discussion of instrumentalism and its problems, see Millgram (2001).

at least partly, in specifying ends and norms.[23] Richardson has further elaborated the specificationist proposal in three important respects. First, Richardson provides a detailed definition of the operation of specification as a relation between two norms (or ends)—the initial one and its specification—that satisfies a number of semantic and syntactic conditions. Second, Richardson has proposed a criterion for telling apart correct (or rational) specifications from incorrect (or irrational) specifications. According to Richardson, a specification is rational as long as it enhances the coherence of the norms found acceptable upon reflection, where such coherence is a matter of finding or constructing mutual support among one's norms and ends and removing relations of opposition or practical conflict. Last, Richardson provides an additional reason for specifying ends: many of our norms conflict, but often one may remove the conflict by specifying them. As opposed to a conception according to which when two norms come into conflict one should either establish a lexical order between them or intuitively weigh and balance them with a view to determining which should prevail, Richardson holds that it is possible to satisfactorily address normative conflict by specifying the norms involved. Thus, according to Richardson, coherence-driven specification is a legitimate pattern of practical reasoning: practical reason is not merely instrumental, one may also reason about values and how to solve conflicts among them.

Another non-instrumentalist approach to practical reason in which coherence plays a fundamental role is that proposed by Susan Hurley (1989). Hurley advances an account of case-based deliberation that gives coherence a central role. According to Hurley, deliberation is first and foremost a process whereby one builds a theory that best displays as coherent the relationships among the several values that apply in the particular case. The fundamental claim of Hurley's coherentist account of practical reasoning is that there is a conceptual relation between the reasons that are relevant in a specific case and judgments about what to do all-things-considered: more specifically, the relationship in question is that of subject matter to theory. That is to say, a judgment about what to do 'all things considered' is right if it is favored by the theory that gives the most coherent account of the relationship among the specific reasons (such as moral values, legal doctrines, and precedents) that are relevant in the particular case. It is critical to note that these theories do not aim at explaining conflict away, which is, claims Hurley, an impossible task. The specific reasons for action that come into conflict in a particular case are not *prima facie*, i.e., reasons that may be shown not to apply, once one knows more about the problem at stake, and thus, that lack residual force. In contrast, Hurley holds that reasons for action are *pro tanto*, which come into genuine conflict and have residual force. For instance, consider a conflict between justice and clemency. It can be the case that an act is just but inclement and that such an act is right insofar as it is favored by the best theory about how justice and clemency are related to each other; the act may still

---

[23]The early pivotal papers on specificationism were by Kolnai (2001) and Wiggins (2001).

be inclement. In other words, the claim that there is a conceptual relation between specific reasons, i.e., *pro tanto* reasons, and all-things-considered judgments does not imply that conflict is eliminable.

In conclusion, coherentist methods, such as those proposed by Richardson and Hurley, provide us with the resources to reason about ends and values and, thus, expand the scope of practical reason beyond means-ends inferences. In consequence, the introduction of coherentist methods in law allows us to accord to reason in law a broader role than the role assigned to it by formalist and instrumentalist conceptions of law, which restrict patterns of practical inference to the rule-case judicial syllogism and the means-end one, respectively. Coherentist methods provide us with a way to reasoning about which ends and values are worth pursuing in law as well as how to proceed rationally when they come into conflict. This does not mean, however, that coherentism assumes a non-conflictual vision of law, as some critics of coherentism have argued (Raz 1992; Kennedy 1997). Quite the contrary. It is precisely because our legal systems are responsive to a plurality of values and because in modern societies there is a diversity of moral, religious, and political conceptions which impose claims upon the law that there is a need to appeal to coherence methods. Coherence does not eliminate conflict, but it gives us a way to proceed in the face of conflict. Thus, coherentist methods are a critical tool for realizing a primary function of the law, namely, that of solving conflict through argumentative means (Atienza 2006, 59).

13.7   The Value of Coherence

Why is coherence a value worth pursuing in the legal context? Which are the reasons why coherence should play an important role in the justification of judicial decisions? These are second-order questions, that is to say, questions about which arguments may be given in support of a coherentist standard of justification. There are three kinds of reasons, I would argue, why coherence should be sought in the course of legal decision-making, namely, epistemic reasons, practical reasons, and constitutive reasons.

The first kind of reasons—the epistemic ones—is the most controversial. Coherentist standards of justification are themselves justified if there are reasons for thinking that a legal decision-maker who accepts beliefs about the facts and the law as justified according to these standards is thereby at least likely to arrive at the truth. To be sure, one of the most debated issues in the coherentist literature is the question of whether coherence and truth are connected in the right way. And, as is well known, one of the main objections that have been raised against coherence theories of justification is that adhering to these standards of justification is not truth-conducive. In fact, some of the criticisms that have been directed against coherence theories stem—one way or another, from the problem of the truth-conduciveness of coherence. For example, one problem that coherence theories of justification face is that of ensuring that observational beliefs play that role that they ought to

play in the formation and justification of beliefs about the world. In addition to the problem of the input or isolation, coherence theories do not provide any criterion for choosing among alternative sets of beliefs that are equally coherent. In light of these problems, coherentist standards of justification seem wholly inadequate as criteria of *epistemic* justification, that is, as criteria that help us search for truth.

To be sure, the problems of the input, isolation, and alternative coherent systems need to be taken seriously. However, although the relation between coherence and truth is problematical, coherentist standards of justification are not doomed to failure. In the coherentist literature there are a number of interesting strategies for showing that coherence and truth are properly connected. Laurence BonJour has given an explanatory argument to the effect that coherence is truth conducive. In his view, the best explanation of the coherence plus stability of a system of beliefs that meets the observation requirement (which guarantees that the belief system attributes high reliability to a reasonable variety of cognitively spontaneous beliefs) is that it corresponds (in the long run and approximately) to the external world (BonJour 1985). According to Thagard, (explanatory) coherence leads to approximate truth when the theory is the best explanation of the evidence, it broadens its evidence base over time, and is deepened by explanations of why the theory works (Thagard 2007). Other philosophers, like Keith Lehrer and Donald Davidson, have provided arguments that seek to establish a conceptual relationship between coherence and truth. According to Lehrer, self-trust, which plays a core role in his coherence theory of justification, allows us to establish a conceptual link between coherence and truth (Lehrer 2000). And Davidson establishes this conceptual connection by means of the concept of belief, as it is defined within his theory of interpretation (Davidson 2001).

To be sure these arguments, while compelling, do not conclusively establish that coherentist standards of justification are truth-conducive. However, in this respect, coherentism does not seem to be worse off than alternative theories of epistemic justification. After all, foundationalism—which is the main competing account of epistemic justification, has not succeeded either in conclusively refuting the skeptical hypotheses. Besides, coherence-driven inferences are defeasible: to require that it be shown that coherence is truth-conducive would amount to requiring that the problem of induction, which is hardly a distinctive problem of coherentism, be solved. In short, in order to show that coherence has epistemic value it does not seem necessary to prove the falsity of the skeptical hypotheses—which are, in any event, as troublesome for coherentism as they are for any other theory of justification.

In light of the foregoing arguments, and leaving radical skepticism aside, one may conclude that the prospects for showing that coherentist standards of justification are epistemically valuable are reasonably good. In the legal context, these strategies provide a plausible starting point for mounting an argument to the effect that accepting beliefs about the facts under dispute by virtue of their coherence leads us to accept beliefs that are probably true. In addition, it is worth mentioning that the problem of the truth-conduciveness of coherence is more acute for some versions of coherentism than for others. In the conception of coherence as constraint satisfaction that I have defended here propositions describing observations—evidence, in law—

have a priority in being accepted and thus, there are good reasons for believing that theories and hypotheses about the facts that cohere with those propositions (granted, of course, that our perceptual beliefs are not systematically mistaken, as the skeptic holds!) are probably true.

With regard to the theory of justification of conclusions about disputed questions of law, the connection between coherence and truth is much less problematical for two reasons. First, anti-realist or constructivist approaches to truth square well with coherence theories of justification. Indeed, the replacement of a conception of truth as correspondence by a definition of truth as coherence has been a common strategy to solve the problem of coherence and truth. And second, constructivist theories of the truth of normative judgments are, in principle, more plausible than realist theories. Thus, there does not seem to be any serious obstacles to analyzing the justification of normative judgments in law in coherentist terms.

In addition, there a number of practical reasons for pursuing coherence in the legal domain. Coherence is instrumental to several values that are central in practical reasoning and that are also important in the legal context. More specifically, coherence facilitates successful coordination, which is surely critical in a collective enterprise, such as law (Bratman 1987, 137; Richardson 1994, 152–158). Coherence also promotes effectiveness, for coherent plans of action tend to work better than conflicting courses of action or overlapping goals. Thus, a certain degree of coherence is indispensable to successfully advance law's project of regulating and transforming social life. Besides, coherence enhances the efficiency of plans of action, for it is more likely that there is a rational use of resources when one pursues a set of objectives that cohere with each other, and this is critical when it comes to public resources (Thagard and Millgram 1996). As is well known, coherence also aids the realization of values that are distinctive of the legal domain, such as the value of legal certainty (Moral 2003). Among other ways in which coherence promotes legal certainty is by facilitating knowledge of the law, for a coherent body of norms is more easily remembered and understood than a body of norms that fail to make sense as a whole. Last, a certain degree of coherence in legal decision-making at both the legislative and the judicial level is also pivotal for securing the social stability that the law aims to preserve (Alexy and Peczenik 1990).

Last, there are also constitutive reasons to value coherence in law.[24] Coherence plays a constitutive role in individual and political identity. A certain degree of coherence in individual and collective deliberation is necessary to be both a unified agent and part of a distinctive political community. When deliberating about the values and objectives that are relevant in a particular case, legal agents are also determining their own identity as members of a political community. Individual identity and group identity are not fixed—as Hurley has brilliantly argued—but they are the result of self-interpretation. Legal decision-makers are not free to disregard a concern for coherence because in so doing they would be refusing to determine their own identity as members of the political community to which they belong.

---

[24]Hurley (1989), especially Chap. 13.

The constitutive dimension of coherence in individual self-determination and group self-determination gives us a foundational reason for valuing coherence as a guiding standard in legal decision-making.

13.8   Coherentism as Anti-formalism

Coherentism provides, I would argue, an alternative to formalist conceptions of rationality, on the one hand, and skepticism, on the other. In the different fields in which coherence theories have been proposed, they have been advanced as an anti-formalist alternative to skepticism. The story, in general lines, goes as follows. Coherence theories in ethics, epistemology, philosophy of science, etc. have been proposed once attempts to provide a 'scientific' theory of rationality for those domains have failed. An easy—and relatively common—response to these failures is the skeptical one: in light of the insurmountable difficulties to give an account of justification in respectable terms—alias, in scientific terms—one cannot but accept that the justification of beliefs, norms, plans of action, etc. in these domains is doomed to failure and, consequently, that one cannot have knowledge in these domains. However, the apparent dilemma between formal rationality, on the one hand, and irrationality, bias, and whim, on the other, would only arise if formalism were the only possible model of rationality. Faced with the failure of attempts to model rationality after scientific rationality in a number of domains, the only viable response is not skepticism. Rather, the failure of these programs reveals that a formal conception of rationality is ill-suited to give an account of justification in domains other than science. Coherentism is then proposed as an alternative to scientific models of knowledge. This does not mean, however, that coherentism is a second-best strategy, which allows us to keep the illusion of knowledge alive despite the failure of formal models. Rather, coherentist proposals result from a firm conviction that these models cannot be appropriately applied in a number of domains and that there is a need to develop broader models of rationality that have the resources to give an account of our practices of justification.

I cannot go here into showing in detail that a similar motivation (i.e., to provide a non-skeptical alternative to formal theories) drives coherence theories in different domains. A few examples, I hope, should suffice to illustrate the point. In epistemology, given the serious problems facing the Cartesian project of grounding knowledge upon secure foundations, coherentism has been claimed to provide a non-foundational response to the problem of skepticism. Similarly, coherence theories in ethics aimed at providing a solution to the regress problem alternative to the traditional, foundationalist, one. Coherentist approaches to practical reasoning are meant to be an alternative to both formal models of practical inference (i.e., deductive models and, more recently, expected utility models) and intuition-based models of decision-making. In philosophy of science, coherentism also provides a middle-way between formalist approaches to the problem of theory-choice (e.g., Bayesianism) and skeptical ones. Similarly, in discourse theory, coherentism has

been advanced as an alternative to formal models of discourse rationality, such as the cost-benefit model endorsed by relevance theorists and skeptical, subjectivist, approaches to discourse interpretation (Sperber and Wilson 1986).

In law, coherentism is also meant to be an alternative to formal models of rationality and, given the problems facing these models, a viable option to skeptical reactions. Coherence theories of law and adjudication aim at solving some problems of formal positivism: the troubling implications of legal positivism concerning the scope of judicial discretion, its difficulties to give an account of the role that moral reasons play in legal reasoning, a dissatisfaction with the conventional account of the sources of law, and a discontent with the limitations of the deductive approach to legal reasoning. As opposed to a conception of legal knowledge as a pyramid, a foundationalist view of legal justification, and a deductive model of legal reasoning, which are key elements of formal or classical legal positivism, coherentism advances a conception of legal knowledge as a raft, a coherentist account of legal justification, and a holistic approach to legal inference. The problems facing classical legal positivism do not necessarily lead us to accept the skeptical conclusions put forward by legal realism and (to a varying degree) the critical movements. Rather, it leads us to rethink the model of rationality that is apposite to law and to give a role to reason in law broader than the one accorded to it by formalist models.

In the context of evidential reasoning in law, coherentist theories of evidence and legal proof provide us with a non-skeptical alternative to Bayesian models. As is well-known, the Bayesian theory of legal proof—which, at least in the Anglosaxon world, still is the dominant model and which has an increasing influence in other legal systems—faces serious problems. To start with, this theory inherits all the problems of Bayesianism, as a general theory of evidence, e.g., the subjectivity of Bayesian calculus, the unavailability of the relevant probabilities, or problems of computational complexity. In addition, there are problems specific to the legal applications of Bayesianism, e.g., the Bayesian theory of legal proof does not give a satisfactory account of the presumption of innocence or the standards of proof. In light of these problems, coherentism aims at providing criteria of rationality for assessing conclusions about disputed questions of fact in law broader than those embedded in the conception of rationality as probabilistic coherence, which underwrites Bayesianism.

In conclusion, coherence theories across domains aim at providing a middle way between formal theories—which face, for several reasons, serious problems—and skeptical views. The success—and shortcomings—of the coherentist project should be assessed in the light of the objective of providing a non-skeptical alternative to formalism. Formalism, in its different varieties, assume, either implicitly or explicitly, that the so-called 'standard theory of rationality', i.e., the view that criteria of rationality derive from formal theories such as deductive logic, probability theory, etc., is correct (Stein 1996). This theory, however, is inadequate for several reasons. To start with, this theory ignores the substantive dimension of rationality, in that it only provides criteria of internal justification; it is overly idealized, given what we know about the psychology of reasoning; and it is too narrow, for a substantial

part of what is involved in reasoning falls beyond the scope of application of these criteria of rationality. In addition, this conception has skeptical consequences, for most of what passes for argument in a number of domains is, in light of the formal standards of rationality, either irrational or arrational. Coherentism seeks to deliver a conception of rationality richer than the formal conception that is assumed in different fields of knowledge, including, to be sure, the legal one.

13.9   Coherentism and Naturalism

Coherentism enjoys a high degree of psychological plausibility and this gives it a distinctive advantage over competing accounts of justification. A drive towards coherence is an important feature of our psychological equipment. 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.[25] Moravski 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 seen, in an important sense, as *homo explanans* (Moravcsik 1990, 213). Simon, Holyoak, and collaborators have shown that complex decision tasks, such as judicial reasoning as well as reasoning about evidence, are performed by building up coherence among a number of decision factors (Simon et al. 2001). In the context of legal fact-finding, these results support previous work by Hastie and Pennington that showed the relevance of standards of explanatory coherence in jurors' reasonings (Hastie and Pennington 1991, 519). That coherence plays an important role in the formation and evaluation of factual hypotheses in law has also been shown, in the context of judicial reasoning, by Wagenaar and collaborators (1993). Hence, the psychological plausibility of coherence-based reasoning in general and, more specifically, of coherence-driven reasoning in law has a solid empirical basis.

But—it might be argued—what is the relevance of these psychological studies to the project of developing a theory of legal reasoning? Legal theory and philosophy of law are, as is well know, normative disciplines. Theories of legal reasoning tell us how one ought to reason in law; they do not aim at describing the process whereby legal decisions are made. That coherence plays an important role in legal decision-making says nothing about which role it ought to play, if any, in a theory of legal justification. The objection is that I am committing the much discussed 'naturalistic fallacy'. However, this objection cannot take off the ground if one endorses a naturalistic approach to philosophy, i.e., the view that philosophy is continuous with science and, more importantly for our purposes, that there is a

---

[25]Lipton has interpreted Kahneman and Tversky's well-known results as indicating the presence of a strong proclivity to explanatory thinking, see Lipton (2004, 108–113).

continuity between philosophy and psychology. The separation between philosophy and psychology, between the normative and the descriptive, is of a quite recent vintage. Before the start of the twentieth century, and the advent of the analytical school, the study of mind and behavior was a central concern of philosophers. In the last decades, with the emergence of the cognitive sciences, the many interconnections between philosophy and psychology have been reestablished, and the standard view about the relationship between the normative and the descriptive has been reexamined. A trend towards naturalizing philosophy has been a main development in different branches of philosophy. In epistemology, there has been an increasing interest in work in cognitive psychology and the development of naturalized approaches to epistemic justification and knowledge has been at the center of the debate in the last years (Kornblith 1994). Naturalism is a popular approach in contemporary discussion about important questions in philosophy of science, such as the relationship between theory and observation or the social structure of scientific knowledge (Godfrey-Smith 2003). And one of the most important developments in moral theory in the last decades has been in the field of moral psychology.[26]

The naturalist trend, with few exceptions, has not taken off in the (more traditional) field of law (Leiter 1998). However, in what may be justly called, in light of their spectacular development, the 'era' of cognitive sciences, legal theory, I would argue, cannot but be responsive to the possible impact that results in cognitive psychology might have on its subject. In other words, it is necessary to 'naturalize' legal philosophy and rethink the relations between the normative and the descriptive. In the context of legal reasoning, there is an additional reason to endorse a naturalized perspective. The main objective of theories of legal reasoning is to ameliorate the legal practice. In other words, the development of a theory of legal reasoning should be at the service of improving legal decision-making—which is not to say that it does not advance purely intellectual interests as well, such as the progress of knowledge. Now, if this is so, then, even though the theory of legal reasoning should involve a great deal idealization, given its normative character, it is important that it does not idealize away of our cognitive capacities so much as to make it ill-suited to guide and regulate legal practice. The naturalist principle that 'ought' implies 'can' constrains the kind of theories of legal reasoning that one should aim at developing. Thus, a coherentist theory of justification, insofar as it builds upon ordinary reasoning processes, is well placed to advance the project of ameliorating the legal practice, which is, I would argue, a central one in legal theory.

To conclude, a theory of justification that gives coherence an important role enjoys, in principle, a high degree of psychological plausibility and this is a good reason to pursue the coherentist project, despite the many—and well known— problems facing these theories, as much in law as in any other domain. It is interesting to note, however, that even though the natural tendency towards coher-

---

[26]For an introduction to the central problems of moral psychology, see Sinnott-Armstrong (2007–8) and Doris (2010).

ence is, from a naturalistic perspective, a reason for adhering to coherence theories, it is also—as argued above—the source of one of the main problems of coherentism, namely, the fabrication of coherence. Coherence theories are objectionable in that they seem to attribute justification to beliefs, acts, decisions, etc. that result from epistemically defective processes. The challenge is, therefore, to develop a theory of coherence that is not only psychologically plausible but also normatively attractive. My own response to this challenge, as explained before, is to complement the theory of coherence with a theory of epistemic responsibility and thus to define legal justification in terms of optimal coherence. Although nothing prevents us from defining optimal coherence in terms of two independent conditions, namely, a condition of coherence and a condition of epistemic responsibility, the second, I would argue, may be understood as implicitly contained in the first one. Epistemic responsibility is not an alien component in the structure of a coherence theory of coherence; judgments of coherence and judgments of responsibility are intimately connected via the concept of agency, as I will argue in the next-and last- section.

13.10   Coherence and Agency

Coherentism puts the agent at the center of a theory of justification. 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 the interpreter brings to a text (Conte 1988). It is the presence of the latter kind of coherence that accounts for judgments of discourse coherence. Coherence is the result of the effort of the interpreter: it is not a given property of a text, but it has to be built in the course of interpretation. Thus, a coherentist theory of justification is inextricably linked with an agent point of view, and this makes considerations of epistemic responsibility essential to justification. Hence, the introduction of the concept of epistemic responsibility in a coherence theory of justification is not merely an ad hoc addition, the objective of which is to remedy some of the problems of coherentism. Rather, responsibility may be viewed as an implicit—albeit underdeveloped—component of the coherence theory of justification.

Thus, a coherentist approach to legal justification reveals that there are important connections between judgments of responsibility and judgments of justification, between the properties of agents—the legal decision-makers who carry out their interpretative tasks in an epistemically responsible way—and the properties of the objects of interpretation—either the law or the facts. As opposed to traditional approaches to legal theory that focus on the properties that the legal system have or should have, coherentism is an agent-centered theory of justification. This does not mean that one should replace the analysis of the properties of legal systems by a 'jurisprudence of subjects' (Balkin 1993). But given that coherence is not merely a property of the objects but that the activity of the subject is critical to judgments of coherence, a coherentist approach to justification brings to light the relevance of

features of the subject to attributions of justification. From a coherentist point of view, a theory of justification cannot neglect the study of the features of legal decision-makers that result in good decisions. In other words, from this point of view, it follows that legal ethics is a substantial part of a theory of legal reasoning.

A number of interesting lines of research opens up once one focuses on the subject—the legal decision-maker—who strives to find the most coherent solution to a problem of proof or a problem of interpretation in law. To start with, the question arises as to which is the most adequate way of spelling out the standards of epistemic responsibility of legal decision-makers. Are the deontic and the aretaic conceptions mutually exclusive? If they are not, how do the duties and virtues of legal decision-makers relate to each other? In addition, it is necessary to give a detailed account of the virtues that are relevant to legal reasoning. Are there any virtues *specific* to legal decision-makers? How do general virtues apply to the legal context? And what role do epistemic and moral virtues play in legal justification? These questions invite us to explore the possible applications of virtue ethics and virtue epistemology to legal theory. More specifically, these questions suggest the possibility of developing a neo-Aristotelian conception of legal reasoning. But these are issues that fall beyond the scope of coherence studies (and this paper) and are rather a research topic for another (future) investigation.

References

Aarnio, A., et al. 1998. *On coherence theory in law*. Lund: Juristfölager i Lund.

Alexy, R., and A. Peczenik. 1990. The concept of coherence and its significance for discourse rationality. *Ratio Iuris* 3(1): 130–147.

Amaya, A. 2007. Formal models of coherence and legal epistemology. *Artificial Intelligence and Law* 15: 429–447.

Amaya, A. 2008. Justificacion, coherence, and epistemic responsibility in legal fact-finding. *Episteme: A Journal of Social Epistemology* 5: 306–319.

Amaya, A. 2009. Inference to the best legal explanation. In *Legal evidence and proof: Statistics, stories, logic*, ed. H. Kaptein, H. Prakken, and B. Veheij. Aldershot: Ashgate.

Amaya, A. 2011. Diez tesis acerca de la coherencia en el Derecho. *Discusiones* 10: 21–64.

Amaya, A. (forthcoming). *The tapestry of reason: An inquiry into the nature of coherence and its role in legal argument*. Oxford: Hart Publishing.

Annis, D.B. 1978. A contextualist theory of epistemic justification. *American Philosophical Quarterly* 15: 213–219.

Atienza, M. 2006. *El derecho como argumentación*. Barcelona: Ariel.

Balkin, J.M. 1993. Understanding legal understanding: The legal subject and the problem of legal coherence. *The Yale Law Journal* 103: 105–176.

BonJour, L. 1985. *The structure of empirical knowledge*. Cambridge: Cambridge University Press.

Bratman, M.E. 1987. *Intentions, plans, and practical reasoning*. Cambridge: Harvard University Press.

Brown, G., and G. Yule. 1983. *Discourse analysis*. Cambridge: Cambridge University Press.

Cohen, S. 1986. Knowledge and context. *The Journal of Philosophy* 83: 574–583.

Conte, M.E. 1988. *Condizioni di coerenza: Ricerche di linguistica testuale*. Firenze: La Nuova Italia.

Davidson, D. 2001. A coherence theory of truth and knowledge. In *Subjective, intersubjective, objective*, ed. D. Davidson. Oxford: Oxford University Press.

DePaul, M. 1993. *Balance and refinement*. London: Routledge.

DeRose, K. 1999. Contextualism: An explanation and defense. In *The Blackwell guide of epistemology*, ed. J. Greco and E. Sosa. Malden: Blackwell.

Doris, J.M. (ed.). 2010. *The moral psychology handbook*. New York: Oxford University Press.

Dworkin, R. 1986. *Law's empire*. London: Fontana.

Feldman, R. 2002. Epistemological duties. In *The Oxford handbook of epistemology*, ed. P. Moser. Oxford: Oxford University Press.

Fodor, J., and E. Lepore. 1992. *Holism: A shopper's guide*. Oxford: Blackwell.

Fogelin, R. 2003. *Walking the tightrope of reason*. Oxford: Oxford University Press.

Gärdenfors, P. 1988. *Knowledge in flux*. Cambridge: MIT Press.

Godfrey-Smith, P. 2003. *Theory and reality: An introduction to the philosophy of science*. Chicago: The University of Chicago Press.

Goldman, A.H. 1988. *Moral knowledge*. London: Routledge.

Hage, J.C. 2004. Law and coherence. *Ratio Iuris* 17: 87–105.

Hastie, R., and N. Pennington. 1991. A cognitive theory of juror decision-making: The story model. *Cardozo Law Review* 13: 519–557.

Hellman, C. 1995. The notion of coherence in discourse. In *Focus and coherence in discourse processing*, ed. G. Rickheit and C. Habel. Berlin: DeGruyter.

Hurley, S. 1989. *Natural reasons: Personality and polity*. Oxford: Oxford University Press.

Kennedy, D. 1997. *A critique of adjudication (fin de siècle)*. Cambridge: Harvard University Press.

Klein, P., and T.A. Warfield. 1994. What price coherence? *Analysis* 54: 129–132.

Kolnai, A. 2001. Deliberation is of ends. In *Varieties of practical inference*, ed. E. Millgram. Cambridge: MIT Press.

Kornblith, H. (ed.). 1994. *Naturalizing epistemology*. Cambridge: MIT Press.

Lehrer, K. 2000. *Theory of knowledge*, 2nd ed. Boulder: Wesview Press.

Leiter, B. 1998. Naturalism and naturalized jurisprudence. In *Analyzing law: New essays in legal theory*, ed. B. Bix. Oxford: Clarendon Press.

Lewis, D. 1996. Elusive knowledge. *Australasian Journal of Philosophy* 74: 549–567.

Lipton, O. 2004. *Inference to the best explanation*, 2nd ed. London/New York: Routledge. 1st edn. 1991.

MacCormick, N. 1984. Coherence in legal justification. In *Theorie der normen*, ed. W. Krawietz et al. Berlin: Duncker and Humblot.

Margolis, J. 1984. The locus of coherence. *Linguistics and Philosophy* 7(1): 3–30.

Millgram, E. 2001. Practical reasoning: The current state at play. In *Varieties of practical inference*, ed. E. Millgram. Cambridge: MIT Press.

Moral, L. 2003. A modest notion of coherence in legal reasoning: A model for the European court of justice. *Ratio Iuris* 16(3): 296–323.

Moravcsik, J.M.E. 1990. *Thought and language*. London: Routledge.

Olsson, E. 1998. Making beliefs coherent. *Journal of Logic, Language, and Information* 7: 143–163.

Peczenik, A. 1989. *On law and reason*. Dordrecht: Kluwer.

Pryor, J. 2001. Highlights of recent epistemology. *The British Journal for the Philosophy of Science* 52: 95–124.

Putnam, H. 1985. *Reason, truth, and history*. Cambridge: Cambridge University Press.

Rawls, J. 1999. *A theory of justice,* ed. rev., Cambridge: Harvard University Press.

Raz, J. 1992. The relevance of coherence. *Boston University Law Review* 72: 273–321.

Richardson, H. 1994. *Practical reasoning about final ends*. Cambridge: Cambridge University Press.

Simon, D. 1998. A psychological model of judicial decision making. *Rutgers Law Journal* 30(1): 1–142.

Simon, D. 2004. A third view of the black box: Cognitive coherence in legal decision-making. *The University of Chicago Law Review* 71: 511–586.

Simon et al. 2001. The emergence of coherence over the course of decision-making. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 27(5): 1250–1260.

Sinnott-Armstrong, W. (ed.) (2007-8). *Moral Psychology*. Cambridge: MIT Press.

Sperber, D., and D. Wilson. 1986. *Relevance: Communication and cognition*. Oxford: Blackwell.

Stein, E. 1996. *Without good reason: The rationality debate in philosophy and cognitive science*. Oxford: Clarendon Press.

Thagard, P. 1998. Ethical coherence. *Philosophical Psychology* 11: 405–422.

Thagard, P. 2000. *Coherence in thought and action*. Cambridge: MIT Press.

Thagard, P. 2007. Coherence, truth, and the development of scientific knowledge. *Philosophy of Science* 74: 28–47.

Thagard, P., and E. Millgram. 1996. Deliberative coherence. *Synthese* 108(1): 63–88.

Timmons, M. 1999. *Morality without foundations: A defense of ethical contextualism*. New York: Oxford University Press.

Wagenaar, W.A., P.J. Van Koppen, and H.F.M. Crombag. 1993. *Anchored narratives: The psychology of criminal evidence*. New York: St. Martin's Press.

Wiggins, D. 2001. Deliberation and practical reasoning. In *Varieties of practical inference*, ed. E. Millgram. Cambridge: MIT Press.

Williams, M. 2001. *Problems of knowledge*. Oxford: Oxford University Press.

Zagzebski, L. 1996. *Virtues of the mind: An inquiry into the nature of virtue and the ethical foundations of knowledge*. Cambridge: Cambridge University Press.