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Proof Beyond a Context-Relevant Doubt

A Structural Analysis of the Standard of Proof in Criminal Adjudication

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Procedure deals with the machinery
by which legal controversies are settled
James B. Thayer

Abstract

The present article proceeds from the mainstream view that the conceptual framework underpinning adversarial systems of criminal adjudication, i.e. a mixture of common-sense philosophy and probabilistic analysis, is unsustainable. In order to provide fact-finders with an operable structure of justification, we need to turn to epistemology once again. The article proceeds in three parts. First, I examine the structural features of justification and how various theories have attempted to overcome Agrippa's trilemma. Second, I put Inferential Contextualism to the test and show that a defeasible structure of justification allocating epistemic rights and duties to all participants of an inquiry manages to dissolve the problem of scepticism. Third, I show that our epistemic practice already embodies a contextualist mechanism. Our problem was not that our Standard of Proof is inoperable but that it was not adequately conceptualized. Contextualism provides the framework to articulate the abovementioned practice and to treat 'reasonable doubts' as a mechanism which we can now describe in detail. The seemingly insurmountable problem with our efforts to define the concept "reasonable doubts" was the fact that we have been conflating the surface features of this mechanism and its internal structure, i.e. the rules for its use.

Keywords: set of epistemic defeaters; context-relevant doubts; reasons for decisions; inferential contextualism; criminal evidence; scepticism; applied epistemology

1. Law and Epistemology

1.1. Introduction

The intricacy of the standard claim that a discipline is as good as its foundations critically surfaces at the intersection between *law* of evidence and *analysis* thereof. The debate on the theoretical and philosophical underpinnings of legal evidence especially criminal evidence seems stalled and plagued by fundamental paradoxes (Redmayne 2008). For one thing, the *epistemological framework* underlying the criminal process, i.e. common sense philosophy cannot deliver what it promises especially in our increasingly complex world: valid inferential relations between the evidence and the verdict (Kotsoglou 2015). Unreasoned decisions based on inarticulate common sense inferences, which conceive the fact-finder as a black box, are paradigmatic cases of arbitrary decision-making. Utilizing inner sensations (e.g. 'feeling sure' or 'beyond reasonable doubt') is an open invitation to self-deception, for they lack *public* criteria of correctness. For another, the Standard Model in the law of evidence, which measures persuasion along a scale between 0 and 1, alternatively: between 0 and 100 (Redmayne 1999), and requires a degree of belief just over .5 in civil cases and of just over .95 in criminal ones, faces two possibly insurmountable problems.

First, aleatory probabilities quantify uncertainty in an axiomatized way, albeit involve repetitive and replicable processes. We simply cannot run parallel controlled trials to test the guilt of the defendant, for litigation deals, Evidence scholars indefatigably remind us, that legal adjudication deals with unreplicable situations (Dennis 2017: 142). There is simply no universe of randomly selected defendants in which we could count the number of times that the defendant is the culprit and the number of times where the opposite is the case. From Aristotle who observed that it is "foolish to [...] demand from a rhetorician scientific proofs" (Aristotle, Nic. Ethics, i3, 1094b) to modern forensic scientists who are at pains to stress that the idea "of a frequency being attached to an outcome for a single event is ridiculous" (Lucy 2006: 5), scholars

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have continuously rejected (bogus) claims of generality when it comes to legal decisions. Therefore, the Standard Model does not discharge the task of establishing repetitiveness and replicability of the pertinent events as a condition for assigning a non-negative real number $N_n \in R$ to an object O_n (persuasion). The idea of a standard of proof (SoP) as a numerical *threshold* for deciding issues of disputed fact is deeply flawed.

Secondly, the level of proof is supposed to depend on the "particular type of adjudication".[1] For that reason, the Standard Model claims, we need to identify what is at stake in each type of adjudication. As opposed to a civil case, in which the risk of wrongful decision is symmetrically allocated between the parties, the necessity of minimizing the risk of wrongful conviction in criminal adjudication engineers a steeply asymmetrical SoP. This arrangement premises on a *categorical* distinction between civil and criminal adjudication. This would presuppose that, for example, every instantiation of the – according to an estimate – ca. 9,000 offences in the criminal law of England and Wales – which range from the quotidian (inconvenience offences) to the momentous (murder and rape) – have graver consequences than, say, any Court of Protection's decision on the withdrawal of life-prolonging treatment. A criminal conviction carries *usually* graver consequences than a civil verdict. However, this is an *empirical claim* as it involves utilities which can hardly be verified. E.g. the decision of a Court of Protection to withdraw or withhold life-sustaining treatment has in many regards graver consequences than almost any decision made by a criminal court. It becomes obvious that the whole discussion was tailored to capital crimes since being sentenced to death is more serious than any other legal consequence. However, now that the death penalty has been abolished in most countries, this distinction has lost its intuitive appeal. The Standard Model cannot provide a good explanation for the assessment of utilities for *each type of adjudication*.

This paper argues that it is possible to piece together a coherent picture of our epistemic practice and procedural devices. My aspiration is not only to settle an academic debate but also to give a theoretically sophisticated account of the procedural formula proof beyond a reasonable doubt (BRD), whose structure is open to scrutiny and which is based on communicable rules. The seemingly insurmountable problem with our efforts to define 'reasonable doubts' or 'feeling sure' was the fact that we have been conflating the surface features of our main procedural device (SoP) and its internal structure, i.e. the *rules for its use*. Having focused on the former for centuries has urged us to move around in circles by providing nothing but paraphrasing. We need to understand the *process*, i.e. the structure of justification that facilitates a microscopic analysis of the particular factual inferences for a warranted knowledge claim such as 'the defendant is guilty' Unless we provide fact-finders with logico-grammatical rules, governing the use of 'feeling sure' or its synonym 'proof beyond a reasonable doubt', and fix the semantics of these words by providing a structure of justification, certainty will remain an elusive concept which obeys no criteria of correctness.

This still leaves key questions unresolved. Who will be the heir to the throne? In order to replace an epistemology, we need much more than a promising theoretical framework. A system of criminal adjudication reaching stalemate is not a viable option for any realistic theory of criminal evidence. The reconceptualization of basic evidentiary concepts as proof, justification and knowledge has to take place during business-as-usual operation. The article proceeds in three parts. *First*, I examine the structural features of justification and how various theories have attempted to overcome Agrippa's trilemma (Section 2). *Second*, I put Inferential Contextualism to the test and show that a defeasible structure of justification allocating epistemic rights and duties to all participants in an inquiry manages to dissolve the problem of scepticism (Section 3.). *Third*, I discuss the surprising insight that our epistemic practices in criminal litigation *already* embody a contextualist mechanism (section 4). This realization raises deep philosophical questions about the primacy of theoretical or practical reason, the general role of philosophy and the direction of cross-disciplinary research. Answering these questions in depth reaches far beyond the scope of the present paper (cf. section 4.1). *Our* main problem is not the inoperability of the SoP but its inadequate conceptualization. Inferential Contextualism provides the framework to articulate an already existing practice and to treat the procedural device of reasonable doubts as the label of a functioning procedural mechanism that we can now describe in detail. Providing the conceptual framework for live procedural devices would doubtless be the maximum that cross-disciplinary research may offer.

[1] *In re Winship* 397 U.S. 358 (1970) (Harlan, J., concurring).

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1.2. Turn to Epistemology

Now, the question is: what could provide us with the theoretical framework and rationalize a ubiquitous feature of our epistemic activity by regulating the drawing of conclusions? The answer, which – I think – is rather simple: epistemology, threatens to nip things in the bud. Evidence scholars who go theoretical on doctrinal issues risk the suspicion of pedantry. Lawyers simply switch off as soon as they encounter sophisticated epistemological concepts (Roberts 2007: 42). This would be, however, a hasty, indeed wrong, reaction – for three reasons.

(a) Legal History Legal history reveals the unsustainability and superficiality of any legalistic and methodologically autistic approach. E.g. it is well documented that, when the law of evidence, which emerged in the eighteenth century, did not grow in vacuum (Shapiro 1991). Historical research unequivocally shows that legal scholars incorporated the epistemological vocabulary of widespread concepts in moral, theological and philosophical literature, and made "a considerable effort [...] to place the English Law of Evidence [...] on a more sound epistemological foundation" (Shapiro, 1991: 223). Integral parts of *our* law of evidence were thus derived from other disciplines which, for various reasons, had been more innovative.

(b) Autonomy of law The adoption of an epistemologically elevated perspective has been traditionally branded as a deviation from the orthodoxy of a purely doctrinal approach, often attributed to the *fin de siècle* American legal scholar James B. Thayer (cf. Roberts 2011). According to this view, the subject of evidence has to remain coextensive with the law of evidence – at all costs. Notwithstanding the criticism against philosophical or mathematical applications to law, this argument falls, I think, short of the mark. Admittedly, Thayer has unequivocally propagated a dichotomy, more accurately a trichotomy: between law, fact and the reasoning process. As Thayer memorably remarked, law and facts are one thing, and "*the process by which conclusions are reached*; namely the process of reasoning" is another (Thayer 1898: 195). However, one thing Thayer makes clear, is that reasoning processes are ubiquitous. First, he defines the Law of Evidence as a "set of rules and principles affecting judicial investigations into questions of fact" (Thayer 1898: 263). And the more the law develops, Thayer remarks, or the more "new situations and complications of fact arise", the more we need to give "definiteness to its phraseology" (Thayer 1898: 189-90). This warrants the conclusion that conducting in-depth inquiries into fact-finding, especially the analytical techniques that facilitate warranted factual inferences are of vital importance. And here comes the crucial point in Thayer's line of thought: He makes clear that "the process of reasoning has a place, and that is *everywhere*." (Thayer 1898: 278). Therefore, we neither abandon the realm of law and the doctrinal (legal) perspective by dealing with the process of reasoning – nor do we grant prerogative powers in exchange for theoretically elevated concepts. On the contrary, we deepen our understanding or even gain fresh insight into the way our fundamental evidentiary concepts and procedural devices operate. For the field of evidence "refers tacitly" to epistemological considerations (Thayer 1898: 265).

(c) Economy of thought As we saw above, in times of intellectual crisis evidence scholars turn to neighbouring disciplines. This is not because epistemologists supposedly have the prerogative of interpretation over concepts underlying evidential matters, but mainly because there are good chances for their concepts to be more progressive than ours. By doing so, we simultaneously follow a methodological *rule*, i.e. the economy of thought. In the same way that we simply do not design and build an operative flying machine in order to travel, we do not have to become philosophers in order to acquire an understanding about basic evidentiary concepts.

2. Law and Scepticism

2.1. Criminal Adjudication. A Search for Truth?

According to the dominant view in evidence scholarship, criminal adjudication is primarily a system rendering "accurate decisions" (Duff/Farmer/Marshall/Tadros, 2007). In the same way that an accurate diagnosis identifies those who *require* treatment, an accurate verdict at a criminal trial identifies those who *merit* punishment. Intertwined with the idea of justice is therefore the idea of truth, since the criminal trial has a duty to ascertain the latter. The centrality of truth in legal enquiries is manifested in various ways. A few examples may serve to illustrate this point. The jury has to take an oath by some deity or affirm that they will give a *true* verdict according to the evidence. The law, e.g. in England and Wales, provides explicitly that one of

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the goals of fact-finders is to form justified true beliefs. Rule 1.1.(a) of the Criminal Procedure Rules (CrimPR) ends with a two-part mandate:

1. Convict the guilty.
2. Acquit the innocent.

Justice thus seems to co-vary with the correspondence between the truth-value of the verdict on the one hand and the real facts on the other hand.[2] The legal system assesses the epistemic performance of fact-finders on the basis of 'truth' qua condition of forensic knowledge. For a decision to be true, we need, according to the mainstream view, to render a verdict whose propositional content *p* corresponds with reality. However, we can meaningfully instruct the fact-finders to acquit the law-abiding citizens and to convict the perpetrators and thus render a true verdict, if (and only if) we abandon the uncertainty-laden space of reasons and assume the standpoint of an omniscient observer who has privileged access to any information. This is an unrealistic scenario, featuring an impersonal, third-person narrator who supposedly has access to the "real facts". Rendering a verdict is not like writing a novel or seeing the world from a god's eye perspective. A rugby manager who gives the instruction 'In order to win, you need to score more tries than the other side' is barely saying anything meaningful (cf. Williams 1995: 239). Having true beliefs and avoiding false ones is undoubtedly a legitimate *aspiration*. Evidence theory and the respective SoP must, however, be much more than a set of overarching goals. They have to include an *instruction sheet*. The two-part mandate mentioned above is meaningless in any epistemic context, until and unless someone explains *how* these (legitimate) goals can be achieved. By treating terms like truth or error as non-epistemic (external) standards of correctness and not as the result of an (analytic) reasoning process, we abandon the fact-finders' epistemic point of view.

So how can we establish the truthfulness of the outcome of criminal adjudication? We need an informed view, not on our goals – the goal of factual rectitude is assumed in modern legal systems – but on the *inferential microstructures* yielding justified verdicts which will in turn warrant the respective overriding goals. In order to assume an external, material perspective – which will allow us to read criminal verdicts against the so-called real facts – we would need, as Williams pithily puts it, "a hot line to Nature's mysteries" (Williams 1995: 239). The absence thereof forces us, however, to make judgements based solely on the evidential features of a given justificatory structure. In other words:

> Reaching factual conclusions that fit well with the admissible evidence and the respective SoP is the way of rendering verdicts that can be regarded as true, not the other way around.

We measure truth by the ways we are epistemologically entitled to raise warranted knowledge claims, not by its correspondence with some cognitively unapproachable objective reality. Truth cannot be discovered, found or sworn. It is, if anything, a propositional function. What *we* need is a conceptual framework that puts emphasis on the procedurally structured process of knowledge-claim validation, i.e. a theory of justification that informs us on the scaffolding of fact-finder's epistemic activity, not a theory of truth.

2.2. Back to uncertainty

In the previous section we saw that the standard analysis of knowledge as justified true belief is in many regards doing injustice to practical inquiries like legal or scientific contexts. Epistemic justification *is* the standard of truth. In criminal adjudication, the SoP is – for very good reasons – the exclusion of reasonable doubts, not objective truth.

Quite naturally, we have to turn our focus to the structure of our knowledge-claim validation processes, i.e. the *structure* of epistemic justification. The problem of epistemic justification – for many the "most central of all" (Bonjour 1988: XI) – examines the structure of reasoning patterns rendering a warranted / justified belief based on evidence. But the moment we begin with this inquiry, we are confronted with an alarming situation, which is central for the discussion of distinguishing adequately justified beliefs (i.e. warranted knowledge claims) from mere opinions. In order to understand this problem, we only need to assume that someone – call him the claimant (hereinafter: *Cl.*) – brings forward a knowledge claim (*p*). Then we need

[2] See *Tehan v. U.S.*, 383 U.S. 406, at 416 (1966) where the U.S. Supreme Court states unequivocally that the "basic purpose of a trial is the determination of truth".

someone else – call him the challenger (hereinafter: *Ch.*) – who will simply ask how *Cl.* came to believe that *p* is the case. And every time *Cl.* brings new evidence (e_{n+1}) into the discussion to back his initial statement, a new challenge is being issued, spearheaded as a simple question 'How do you know?'. We can depict this discussion, known as Agrippa's Trilemma (*AT*) (Striker 2004), as follows:

$$p \leftarrow e_i \leftarrow e_{i-1} \leftarrow e_{i-2} \leftarrow e_{i-3} \leftarrow \ldots \leftarrow e_{i-n}$$
(structure 1.1.)

Three options (N_{AT}) emerge for *Cl.*:

1_{AT}. *Cl.* can always keep trying to bring new evidence into the discussion, i.e. embark on an *infinite regress*:

$$p \leftarrow e_i \leftarrow e_{i-1} \leftarrow e_{i-2} \leftarrow e_{i-3} \leftarrow \ldots \leftarrow e_{i-\infty}$$
(structure 1.2.)

2_{AT}. *Cl.* can flatly refuse to go on infinitely. He will then at some point make a dogmatic, i.e. unjustified assumption (*UA*) which is not backed by any reasons:

$$p \leftarrow e_i \leftarrow e_{i-1} \leftarrow e_{i-2} \leftarrow e_{i-3} \leftarrow \ldots \leftarrow \mathrm{UA}$$
(structure 1.3.)

3_{AT}. *Cl.* can reiterate an argument he has already used, i.e. opt for a circular loop and bring the same piece of evidence (in this case: e_2) into the discussion more than once:

$$p \leftarrow e_1 \leftarrow e_2 \leftarrow e_3 \leftarrow e_4 \leftarrow \ldots \leftarrow e_2$$
(structure 1.4.)

At this very moment, the question ('How do you know?') reveals its destructive force. A seemingly innocent question triggers a worrisome conclusion. The task of providing a general account of justification ends in failure and thus in scepticism. It seems that we are not entitled to raise any knowledge claim since we cannot back our propositions with adequate evidence. We qua finite beings cannot let the chain of justification run away to infinity. Both other options are unacceptable from an epistemological point of view, too. Neither can we arbitrarily terminate the chain of reasoning, nor can a proposition serve as both a conclusion and a justifying premise by being brought forward as a reason twice. The conclusion that no empirical claim is ever justified relies, seemingly, on *our own* concept of justification – not on a far-fetched sceptical claim. Claimants (epistemic agents) have no epistemic rights insofar as they cannot adequately justify any belief. As a result, we have to at least temporarily suspend judgement.

Both main theories of epistemic justification, i.e. foundationalism (section 2.3.) and coherentism (section 2.4.), are trying to attack this conclusion head-on and to show that we can construct a structure of justification rendering knowledge claims capable of justification.

2.3. Foundationalism

Foundationalist theories of justification aspire to identify classes of beliefs that can bring a chain of reasoning (see structure 1.1) to an epistemologically sustainable halt. The common denominator among them is the so-called twofold thesis, according to which a class of beliefs possess an immediate, intrinsic epistemic status of justification. It is intrinsic because it does not depend inferentially on the epistemic justification of other empirical beliefs. And it is immediate because empirical beliefs of this sort are taken to be self-explanatory. These basic beliefs (*F*) are regarded as the "ultimate source of justification for all of empirical knowledge" and have thus the capacity of terminating (otherwise infinite) chains of justification (Bonjour 1985: 15). By postulating a certain kind of epistemically privileged beliefs, which are *intrinsically* credible, we generate a structural asymmetry for the architecture of knowledge (Audi 1998: 49). While *basic* beliefs bring justification to an ultimate end, *non-basic* ones – i.e. the second class of empirical beliefs – belong to the super-structure and derive their justification from the former through "justification-transmitting inferential connections" (Williams 1995: 82). In that sense, an individual belief is according to epistemological foundationalism, justified if (and only if) its

pedigree leads directly or via more inferential steps to the privileged class of basic beliefs. In the history of epistemology, plenty of candidates for *F* have been defended: experience, immediate awareness, brute-sense impressions, e.g. visual or auditory appearances, protocol sentences, or observation terms are only a few examples. All these candidates presuppose that basic beliefs are not dogmatic and can terminate the chain of justification in an acceptable way. In other words, foundationalists cast doubt on the middle horn (structure 1.3) of the Agrippa's Trilemma:

$$p \leftarrow e_{i} \leftarrow e_{i-1} \leftarrow e_{i-2} \leftarrow e_{i-3} \leftarrow \ldots \leftarrow F$$

(structure 1.5)

Foundationalism in Law The idea that some categories of beliefs are basic and have an intrinsic epistemological status is not strange to legal reasoning or practice. An example will suffice to illustrate this point. In a controversial case, the U.S. Supreme Court has invoked brute-sense impressions to justify its decision, thus assuming that a video footage combined with properly functioning sensory systems on behalf of the viewers could effectively terminate the chain of justification.[3] The Court used a videotape capturing the events in question, as the judges – in a rare, nonfigurative instantiation of the legal principle *res ipsa loquitur* – were "happy to allow the videotape to speak for itself".[4] So they uploaded a URL for a digital rendering of the videotape to the Court's website, thus creating the Court's first (and to the best of my knowledge: only) "multimedia cyber-opinion" (Kahan et al. 2009).

Both arguments premise on self-justifying beliefs, which can (a) be meaningfully used or (b) terminate a chain of justification – and can thus be read in the light of a foundationalist tenet: bringing justification to an absolute stopping point is grounded in the fact that the content of these beliefs has been directly apprehended through the video footage or the applicant's mere presence in the court room. For these beliefs possess a warrant which does not depend on the justification of other empirical beliefs. The fact-finder is released from his epistemic duty to establish an evidential link between premises and conclusions of arguments, since the evidence in question is self-explanatory. Basic beliefs excuse the fact-finder from charges regarding lack of accountability.

2.3.1. Foundationalism and the Myth of the Given

The idea of basic beliefs as something indubitable or "given" has considerable intuitive plausibility. Observational knowledge is apparently grounded in our direct experience of the world and self-evident propositions such as 'the colour of this object is red' or generally in things we see and hear inside and outside the court room – things that are justified non-inferentially. Although I cannot even hint at the many criticisms against foundationalism, I will focus in this section on the argument with the most destructive power: the criticism against the "Myth of the Given" (Sellars 1963). We saw above that epistemological foundationalism has certain implications for the architecture of knowledge. In that sense, there must be some kind of connections / logical relations between basic and superstructure beliefs, which are inferentially based on the former. Sellars contended that the idea of foundational beliefs as something *given* to one's consciousness meets insurmountable problems. Undeniably, the 'world out there' *causes* our perception thereof. But causal relations do not suffice to provide the inferential relations between our beliefs and the external world (Sellars 1963: 127). If we want *epistemic justification* to be transferred from one belief to another via inferential connections, we need some form of compatibility between basic and superstructure beliefs. Chains of justification involve epistemic relations rather than blind causality (Williams 1995: 168).

Foundationalist theories are subject to criticism, for they have to explain how observations are in no need of justification but can at the same time stand in logical relations to e.g. the belief 'In the videotape, I see such and such things'. Either the phenomenon has no propositional content – i.e. has not been conceptually articulated and is for the same reason *incompatible* with other articulated beliefs – or the same appearance has been conceptually articulated but is also in need of further justification. Both outcomes of this dilemma are fatal for foundationalist theories. To the same conclusion came three psychologists who took up the 'see-for-yourself' challenge set by the U.S. Supreme Court in the case discussed above. In an empirical research, they showed the video footage to identifiable groups of citizens and concluded that while a

[3] See *Scott v. Harris*, 127 S. Ct. 1769, 1773 (2007).
[4] *Id*. at 1775 (majority opinion); Cf. *Id*. at 1781 (Stevens, J., dissenting).

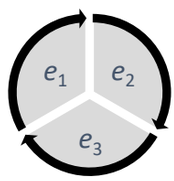
"fairly substantial majority did interpret the facts the way the Court did", people with different ethnical or ideological backgrounds had formed a competing factual perception. The invocation of brute-sense impressions to justify a decision, Kahan et al. argued, has nothing to do with the question asked by the Court. The question is not whether to believe one's eyes, but rather "whose eyes the law should believe" (Kahan et al. 2009: 841). Justice Scalia was right in being confident that the videotape "speaks for itself". Yet, the answer to the question of *what* the video had said varies with the person the video is talking *to*. Treating sense data as a regress stopper results in cognitive illiberalism since one assumes that other people could not possibly perceive the pertinent data on the videotape differently (Robertson/Vignaux 1993). The idea of self-justified beliefs as an Archimedean point resembles the idea of perpetual motion which produces work without the input of energy. Epistemic justification has to be earned by giving reasons, just as energy has to be produced. The criticism against foundationalist theories of justification made increasingly clear that even observational knowledge of e.g. simple objects or colours bring our whole conceptual and inferential machinery into play (Caruso et al.: 2009).

2.4. Coherentism

The second candidate attempting to tackle Agrippa's Trilemma are holistic theories of justification placing internal consistency (coherence) at the heart of epistemic activity. Coherentists deny that it is the *content* of an individual belief – i.e. whether it is a basic or superstructure belief – that determines its epistemic status. Accordingly, a belief is justified if (and only if) it coheres with a set of other beliefs, in other words: if (and only if) a belief is part of a system of beliefs which hangs together (Bonjour 1985: 93). Unsurprisingly, the design of coherentist theories of justification has major implications for the architecture of knowledge, which now has to be imagined as a network rather than a pyramid. The predicate 'justified' can thus only be attributed to a set of coherent beliefs. Coherence is predominantly a feature of the whole system rather than of an individual belief. Every belief contributes to the consistency of the system and can only be conceived as part of it. As Neurath (1959: 201) memorably put it,

> "we are like sailors who must rebuild their ship upon the open sea, never able to dismantle it in dry-dock and to reconstruct there out of the best materials."

Obviously, this results in radical holism. In terms of Agrippa's Trilemma: coherentism implies that circularity (structure 1.4) is after all not such a bad idea. For it allows an inference from e_1 to e_2, then from e_2 to e_3, and then from e_3 to e_1, which is unavoidable in a network of interconnections:



(structure 1.6)

Explanationism Coherence theories are neither new nor unknown to legal scholars – especially evidence theorists. In fact, *story-telling* occupies centre stage in the literature on fact-determination. Similar ideas – propelled by the increasing interest amongst psychologists (e.g. Hastie/Pennington 1986) in the reasoning patterns employed by fact-finders – have been put forward by a number of scholars who defend a narrative account of juridical proof (Amaya 2015). Ronald J. Allen has in a series of articles constructed the "relative plausibility theory" and purports to understand juridical proof as "a form of inference to the best explanation" (Allen, 1994). Of course, Allen realizes that the term 'plausible' does not make things easier. He explains that "[w]hat is 'plausible' is a function of the explanation, its *coherence*, consistency, coverage, consilience, and how it fits into the background knowledge possessed by the fact-finder" (Allen 2008: 325). This has, obviously, implications for what can and should count as (relevant) evidence: Evidence is relevant, Allen remarks, "if it fits into an explanatory account" (Allen 2008: 327).

Both coherence and narrative theories have been backed by empirical research showing that human beings do employ narratives (story-telling) when making judgements under uncertainty – and that as a matter of fact, fact-finders choose between the plausibility / coherence of the stories involved in the legal process. Notwithstanding the fact that empirical results about story-

telling do not map onto normative aspects of any theory of evidence, the coherentist theories of justification face at least two insurmountable problems.

Isolation The first line of attack questions whether coherence theories have any connection to reality, i.e. whether they are *truth-conducive*. If justification – so the argument goes – is to be regarded as an exclusively system-internal matter, then there is no way to differentiate between "arbitrary fairy stories" and an "historical report" (Schlick 1959: 216). Remember that coherence is a system-internal relation, for justification premises on a set of individual beliefs that relate to one another. Coherence theories of justification make it possible for the mutually exclusive hypotheses 'Earth is flat' and 'Earth is round' to be equally justified. This argument is referred to as the *isolation objection* and applies smoothly to the narrative approach, too. If the "critical insight of the relative plausibility theory" (Allen/Leiter 2001: 1528) is that fact-finders determine the relative plausibility of the competing stories advanced by the parties and the only criterion for relevance is how well it integrates into an explanatory account, then narrative approaches jettison their veritistic character. Theories or stories in court which can be classified into the "best-fitting verdict category" (Amaya 2015: 102) literally do not come to grips with reality. Propositions like 'The earth is flat' or 'The Germans didn't commit the Holocaust' can be – if surrounded by an appropriate, perfectly coherent set of beliefs – deemed equally plausible / coherent as the opposite propositions, i.e. 'The earth is round' or 'The Germans executed six million Jews'. As *Bonjour* remarked – after he had repudiated his own coherentist theory – we are unable to choose between an infinite number of equally coherent systems of beliefs in an "epistemically non-arbitrary way" (Bonjour 1985: 25).

Computability The second objection highlights the fact that by allowing inferential connections between all atomic propositions, in order to create a net of beliefs, we trade coherence for epistemic paralysis (Cherniak 1984: 53). As Allen himself remarks, a typical judicial context involves a "rich, highly complex set of interdependent pieces of evidence" (Allen 1997: 258). No algorithm or human has the capacity to 'do the math' by analyzing even a modest system of beliefs consisting of 100 propositions. The process becomes instantly computationally intractable, for the cataloguing of the combinatorial possibilities of all these elements would strain even a super-computer. In attempting to solve the problem of scepticism and adequate justification, we are yet again walking blindfold into another problem.

3. A Diagnosis of Scepticism

3.1. Epistemological Contextualism

Both theories (section 2.3. and 2.4.) that constitute the heart of epistemologists' efforts to tackle scepticism take the sceptical challenge at face value by trying to construct a sceptic-resistant theory of knowledge. Therefore, they are regarded as *direct* responses to scepticism (Williams 1995: 146). So now disaster threatens since these efforts end up in failure. Epistemological contextualism, a term which has become a shorthand name for a growing movement in epistemology, signifies a rather different, *indirect* approach to the problem of scepticism. The present study cannot examine all kinds thereof (see Kotsoglou 2015). The problem is not just the great diversity of contextualist theories, but mainly the fact that "epistemological contextualism" is a collective label for two distinct families of theories (Baumann 2005: 229): Semantic Contextualism (*SC*) and Inferential Contextualism (*IC*). These two groups not only have a different theory design but rather tackle different problems, since SC offers a *therapeutic* diagnosis of scepticism (see section 3.1.1.) whereas IC offers a *theoretical* one (see section 3.2. and 3.4.).

3.1.1. Semantic Contextualism

Proponents of *SC* maintain that the verb 'to know' is context-sensitive in the sense that sentences of the form '*S* knows that *p*…' will express different propositions and thus have different truth values, depending on their context of utterance (see e.g. Cohen 1987: 3). The main tenet of *SC* is the semantic doctrine according to which epistemological key terms such as 'to know' behave like an indexical, the semantics of which involve degrees or scales. They further claim that the problem of scepticism is just a misunderstanding that is based on linguistic confusion. Paradoxes arise because we fail to notice the indexical character of the expression 'to know'. However, *SC* is subject to criticism for two main reasons:

First, we have no linguistic evidence for the gradeability of knowledge claims. While *SC* suggests that the word 'to know' behaves somewhat similar to adjectives like 'tall' and 'flat', knowledge ascriptions are apparently not gradable. Expressions such as 'the witness very knows that the suspect committed the crime' or 'witness A_1 knows better than witness A_2 that the suspect committed the crime' strike us as particularly odd (Stanley 2004: 125-142).

Second, *SC* presupposes the *continuity* of the epistemic spectrum of error possibilities. According to *SC*, a change in context consists of either raising or lowering the epistemic standards. And whenever sceptical scenarios (i.e. even far-fetched error possibilities) are made explicit to the conversational context, we raise the epistemic standards to the maximum. As a result, we are forced to conclude that everyday knowledge is somewhat less significant and inferior than philosophical knowledge. How could we resist choosing more austere epistemic standards for our most important affairs in life once we come to realize that the philosophical context is at the more demanding end of the spectrum? For this would mean among other things that a fact-finder in a criminal trial who questions the existence of the world at the time of the alleged crime would be replacing laxer by stricter standards of scrutiny. What is more, scepticism about knowledge cascades down the justification scale and infiltrates even normal or scientific knowledge claims, for the set of admissible doubts (error possibilities) at the upper end of the scale becomes unrestricted. The effort to compartmentalize knowledge and to contain scepticism in the philosophical context – where error possibilities are unlimited – is not convincing.

3.2. The Prior Grounding Requirement

Proponents of *IC* deny that scepticism results from a misunderstanding. After all, we do understand the sceptical challenge. *IC*'s target is to identify its theoretical commitments and to show that there is something very peculiar about our obligation to back up any belief. That is the essence of the proffered theoretical diagnosis of the problem of scepticism (Williams 1995: 253).

One of the most striking elements of the Agrippan problem is the fact that, as we saw above, the *Ch*. can meaningfully raise the question '*How do you know?*' no matter how well-informed or well-prepared the *Cl*. is. In fact, the whole destructive force of the Agrippan problem is spearheaded by this simple question. Put simply, even if a belief (*p*) is "in accordance with the best methods then developed for discovery and testing in a scientific domain" (Annis, 1978: 215), the *Ch*. is still entitled to put '*p*' into doubt. Let us depict the structure of this conversation (Table 1.1):

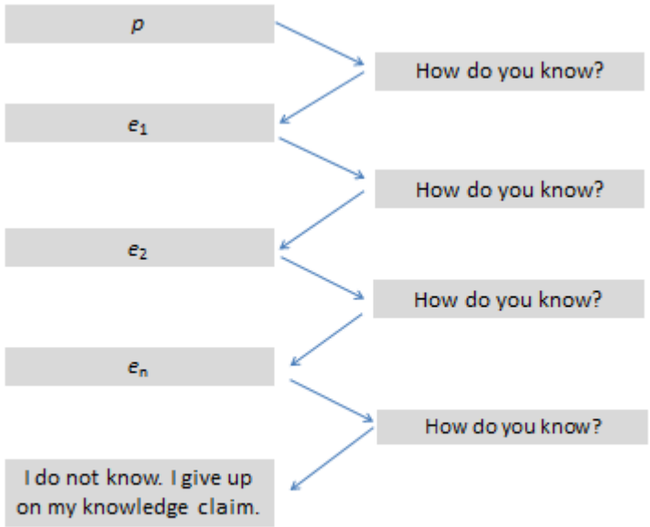


Table 1.1

We realize that, as soon as we respond to Agrippa's challenge, the sceptic is bound to win. As the cardinality of the set of admissible naked challenges becomes unrestricted, we allow the philosophical sceptic to take verification to its extreme. The *Cl*. will inevitably reach the point where he does not know how to answer any more and can only stamp his feet, insisting on the rectitude of evidence. It seems that the language game into which the *Ch.* invites us has a scepticism bias.

A central feature of the abovementioned structure of justification is the fact that all justificatory burdens are placed exclusively on the *Cl*. The same feature distracts us from the fact that the sceptic has absolutely no epistemic duties. Is this, however, a natural state of things? The blueprint of this language game is by no means unconditioned or imposed by the "nature of epistemic justification" (Williams 1995: 170). The *steeply asymmetric* allocation of epistemic duties and rights is not a self-explanatory state of things in the same way that absolute monarchy is not a natural form of government. The language game is thus loaded. The unrestricted entitlement that relieves the respective *Ch*. from all epistemic duties outlines at the same time the theoretical commitment of the Agrippan sceptic. The set of rules and theoretical commitments described above is a highly theorized conception of justification, which we are by no means bound to accept without contradiction. The unconditional authorization to issue naked challenges is known as the Prior Grounding Requirement (PGR) (Williams, 1995: 150). According to the PGR, by entering a claim or evidence for a belief, we *automatically* trigger a naked challenge, i.e. the question 'How do you know?'. Once entered, challenges deprive knowledge claims of their justificatory status.

3.3. On Certainty

The language game described above is not just counterintuitive but runs against well-sustained epistemic practice. At least among adults, all epistemic activity is a two-way street. The question 'How do you know?' becomes at some point insofar void of meaning, as it is not accompanied by an explanation of the reasons necessitating an answer. The *Ch*. can reiterate the same question infinitely, whereas the *Cl*. can never take on a relaxed attitude. This is a striking asymmetry. Authorization to challenge a belief should – for anyone with pretensions to epistemic responsibility – also be earned. Arguing that e.g. some experiment results may change on their own or that the accused may have an unknown twin brother when there is absolutely no reason to believe so, does not engineer higher epistemic standards; it implies a lack of understanding about the direction of the inquiry (Wittgenstein 1969).

Wittgenstein, who provided us with the blueprint of pragmatist epistemology and *IC*, argues that doubts have to be grounded too, if they are to be meaningful. He explicitly uses real, down-to-earth epistemic inquiries such as a criminal trial and stresses that these inquiries are based on some certainties which cannot be asserted or doubted in the same context. These doubts would not be "reasonable" (Wittgenstein 1969: para 8, 335). The element that gave thrust to Wittgenstein's epistemological thought was the belief that our epistemic practices are deeply rooted in our practical needs, not in philosophical reflections. He points out that "[i]n the beginning was the deed" (Wittgenstein 1969: para 402), thus parting ways with philosophical orthodoxy and the primacy of theoretical reason, which is detached from all practical constraints. Doubts are not destructive weapons but useful tools in a language game consisting of a complex set of practices such as adducing and examining evidence in order to reach a decision.

Epistemic practices (and their essential element: doubts) are designed to "bring an open question to resolution", not to perpetuate discussion or render any knowledge claim impossible (Stroll, 1994: 146). Doubting presupposes normative structures and certain propositions which are exempt from doubt. These methodological constraints do not forestall critical thought, but on the contrary *enable* it. Without non-doubting, there is no doubting either –at least in Wittgenstein's view. The latter exists only if the former does, too. That is not a manifestation of unreflective hastiness or epistemic dysfunction, he adds. "[I]t is part of judging" (Wittgenstein 1969: para 150). The foundations of an epistemic inquiry, i.e. certainties (*C*) are indubitable not qua necessarily true propositions but qua methodological hinges enabling directed questioning. E.g. trial judges in common law jurisdictions routinely step in and remove particular issues from adversarial dispute by formally 'noticing' them. Certainties operate as rules, enabling us to treat other propositions as true or false. Graphically speaking:

$$p \leftarrow e_{i} \leftarrow e_{i-1} \leftarrow e_{i-2} \leftarrow e_{i-3} \leftarrow \ldots \leftarrow C$$

(structure 1.6)

Meaningful, directed doubting which advances knowledge and serves practical needs presupposes indubitable propositions – that is the main message of "On Certainty". Ceaseless questioning introducing doubts about everything at once transgresses the bound of (legitimate) doubt: "A doubt without an end is not even a doubt." (Wittgenstein 1969: para 311-315). Without reasonable grounds for doubt, one cannot begin the game of doubting as questions like the ones

set right above lack a procedure of closure. They do not make sense because they do not "come to an end somewhere" (Wittgenstein 1969: para 625). These illegitimate questions are an instantiation of a behaviour that only vaguely resembles doubt-behaviour. They are detached from real life, for they cripple "our acting, which lies at the bottom of the language game" (Wittgenstein 1969: para 204). Sceptical quasi-doubts cannot undermine our knowledge as they will at some point cross the threshold into unintelligibility. They stand outside our practical inquiries.

Pointing at the need to base doubting or specific grounds, we once again realize that scepticism is underpinned by theoretical commitments (PGR) which are not self-evident; indeed, they are deeply problematic, and we gain the right to challenge the latter. By rejecting the PGR, we achieve that a) the sceptic loses the right to challenge everything without providing grounds and b) we pave the way for a *fair* allocation of epistemic rights and duties of *Cl*. and *Ch*. In order to call into question a belief or the claimant's entitlement to hold it, we need more than a naked challenge. Required is the instantiation of a real doubt. A challenger has to explain what exactly he has in mind. We can represent this in the following way (Table 1.2):

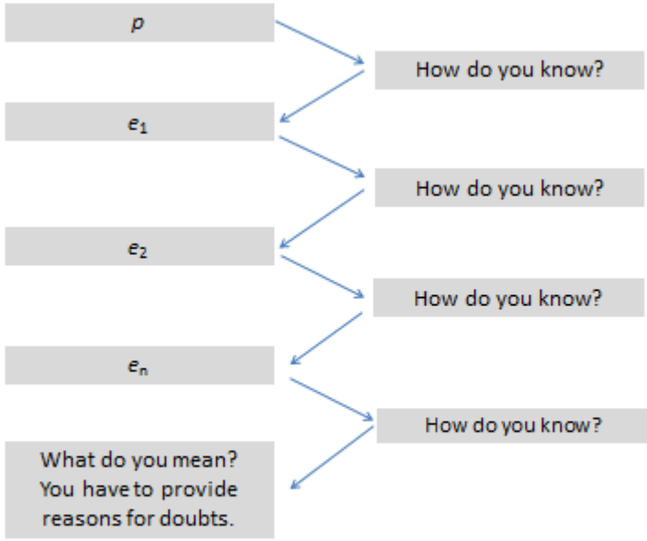


Table 1.2

Williams calls this justificatory structure the Default and Challenge (*DaC*) strategy (Williams 1995: 152). According to *DaC*, the claimant is entitled to a belief *p*, if the latter is backed up by reasons (e_n), unless the *Ch*. introduces specific reasons (*epistemic defeaters*) that prove the opposite or challenge the correctness of *p*. It becomes apparent that one of the distinctive features of *DaC* is that it assigns justificatory duties to all participants of an epistemic inquiry. The *Ch*. no longer has the unconditional authorization to issue naked challenges. This simple move, i.e. the slight modification in the epistemic engine of the language game, "stops the regress in its tracks" (Williams 1995: 151). As Fogelin puts it, the challenge of Pyrrhonian scepticism is once accepted "unanswerable" (Fogelin 1994: 119). We have very good reasons not to accept the challenge.

3.4. Inferential Contextualism

The central feature of *IC* is the insight that the rules of an epistemic inquiry are not self-justifying epistemological entities but norms and standards that we set, reject or modify. Standards for correctly attributing or claiming knowledge are not fixed once and for all, i.e. they are not universal, but subject to circumstantial variation (Williams 1995: 159). For example, the question whether some sort of error possibilities is admissible for a certain category of crime – is not answerable to the alleged eternal nature of justification but rather subject to "actual social practices" (Annis 1978: 215). A variety of epistemic norms, practices and rules will determine the inferential structure of an inquiry – i.e. which propositions will remain indubitable, which ones will enjoy a default status, and which epistemic defeaters will gain membership to the *set*

of epistemic defeaters (SED) in play. SED denotes the set of legitimate doubts that can be introduced as a defeasible structure into the respective language game (Kotsoglou 2015):

$$SED = \{D_1, D_2, D_3, \ldots D_n\}$$
(structure 1.7)

Herein lies *IC*'s most distinctive feature, which also makes it very appealing for practical purposes. The raising and lowering of standards of proof does not consist in the raising and lowering of the alleged degree of probability – this has proven to be deeply problematic – but in the variable cardinality of the SED. The SED *contracts* and *expands* according to a number of contextual parameters salient in the respective inquiry. By introducing a new error possibility, we issue a defeater and raise the standards for claiming or attributing knowledge – and vice versa. The standard of proof is heightened or lowered as the cardinality of the SED, i.e. the heart of the epistemic mechanism, changes.

3.5. The contextual parameters

IC's theoretical toolkit includes contextual factors which will in turn determine the cardinality of the SED. Generally, certain propositions need to be exempt from doubt if we need to raise meaningful questions at all. Uncertainty about the proposition '2 + 2 = 4' does not make us more diligent or stringent (outside a seminar on Peano arithmetics). It shows that we do not understand numbers. Some propositions serve as *hinges* (*C*) which do not condemn us to foundationalism but rather make it possible to conduct meaningful and targeted research. For example, it would be impossible to conduct an experiment and at the same time raise questions about the efficiency or even the very existence of the apparatus (*intelligibility constraints*) or the underlying statistical framework (*methodological constraints*). A jury can apply more or less strict standards of proof. But in a criminal trial, one could claim only on the pain of irrationality that "someone came into the world without parents" (Wittgenstein 1969: para 335). A palaeontologist who feels forced to prove that the planet has been in existence for longer than 4,000 years is not simply raising the level of scrutiny. He is changing the subject by ignoring *dialectical* constraints of this specific inquiry (Fogelin 1994: 93). As James Gleick reminds us: "If all scientists had to begin from the beginning, questioning fundamental assumptions, they would be hard-pressed to reach the level of technical sophistication necessary to do useful work" (Gleick 1997: 36).

Furthermore, we can have variation even among the generally acceptable error possibilities in a certain inquiry. A cost-benefit analysis based on the values at play steps in. For example, we (annoyingly) accept many false-positive fire alarms at our workplace because we recognize the value of human life and property. And we realize that minimizing the risk of an undetected fire necessitates an inversely proportional risk of false alarms. Viewed in the light of *IC*, if the stakes are high, more severe epistemic standards are in order. Spending millions of tax payers' money in order to find a missing child is common practice, whereas a few minutes are enough for a stolen bicycle, even if in both cases there is no line of inquiry. In other words: the cardinality of the SED, i.e. the severity of our epistemic standards, also depends on *economic parameters* and the utilities of the probandum. All factors described above concern the personal dimension of epistemic justification. Another parameter purports to connect personal justification with the "well-groundedness" (reasonableness) of a belief by adding an externalist element (Williams 1995: 162). At the end, it is the community view of what reasonable means that allows us to assess the adequacy of an epistemic performance.

Let us take stock: if important values are at stake and the costs of an error are high, the SED has to expand: we impose austere standards of justification. What is good enough in one epistemic context is barely sufficient in a different one. Our limited time and resources as well as the need for a finality of decisions necessitate the abovementioned economic considerations. For example, a criminal process is neither a ritual nor an open-ended historical inquiry (see Art. 6(1) ECHR). A legal system will treat things valued as benefits and things to be avoided as costs. It will then adjust the reasonable epistemic standards accordingly.

4. Applied Epistemology or Theorized Practice?

4.1. Applications

Academic papers sitting between law of evidence and epistemology traditionally proceed from the abstract to the concrete, i.e. from the conceptual framework to the respective applications

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thereof. So how would *IC* (re)shape our epistemic practice? We are back at the point where the whole discussion starts: the *SoP* in criminal adjudication and the question about which standard is set by the procedural device 'proof beyond a reasonable doubt'.

IC brings about in my opinion the Saul effect where scales fall from our eyes. We can now 'see' that our epistemic practice – what we routinely do – is at the same time a robust normative theory of justification. Criminal courts across common-law jurisdictions have routinely stressed that only substantial – as opposed to fanciful (sceptical) – doubts can prevent a conviction.[5] In his seminal 'Webster charge', Judge Shaw instructed the jury that reasonable doubt "is not mere possible doubt; because everything relating to human affairs [...] is open to some possible or imaginary doubt".[6] Evidence scholars have also repeatedly remarked that probative value is "highly *contextual*, depending on the facts of individual prosecutions" (Roberts/Zuckerman 2010: 446). *IC* can now provide an adequate description of the dynamics of this mechanism enabling contextual variation (cf. Ho 2008). This does not mean that *IC* and my justification model is just a correspondent reflection of the world and of what actually happens. The added value is that we employ an epistemological vocabulary to articulate our main procedural device. We can now analyse – and not just vaguely describe – what criminal courts actually do in their daily business. The question of whether *this* is applied epistemology or theorized practice loses thus its importance. Articulating our epistemic practice enables us to refine and adapt it more efficiently to our procedural aspirations.

So our epistemic practices and inquiries *already* embody mechanisms that raise or lower the standards for attributing knowledge by contracting or expanding the semantics of 'reasonable doubt'. The model does not just spill out easily into our epistemic practice but conceptualizes in a more accurate way the rules underlying that practice. It provides us with the right – in Kuhn's terms: "metaphor" – which enables us to "see" things more clearly (Kuhn 1996: 196). In the same sense, the model is the conceptual framework for an epistemic practice hitherto visible to us only through its surface features, i.e. the predicate 'reasonable doubts' whose content may have posed the biggest riddle in the law of evidence. But 'reasonable', as any other concept, is not a thing; it has no essence to reveal. It has semantics whose rule-governed use we can now adequately describe through the conceptual apparatus of the SED.

After all, the BRD standard which can now be read as a *proof beyond context-relevant doubt* standard (structure 1.7) did not result from a theoretical discussion in the 19th century. It emerged dynamically as an epistemic *practice* and became widely accepted as the SoP in criminal adjudication. It is thus the necessity and our way of acting that lies at the foundation of our thinking

> "Giving grounds, however, justifying the evidence, comes to an end; -but the end is not certain propositions' striking us immediately as true, i.e. it is not a kind of *seeing* on our part; it is our *acting*, which lies at the bottom of the language-game." (Wittgenstein 1969: para 204).

The concept "reasonable" suggests the shadow of something still deeper; not impenetrable or mystical but inadequately conceptualized. As Moyal-Sharrock (2004: 205) explains, experience void of concepts is "only *intellectually* blind, not inoperable". Despite the absence of a conceptual framework, the system of (criminal) adjudication acquired the institutional know-how in order to resolve social conflicts – efficiently and intelligibly. By extensively employing the doctrinal device of 'reasonable' – the law is overly reliant thereupon – legal systems have managed to find their way about. This adaptive, "fluid principle"[7] allows us to accommodate an infinite number of cases. Our failure to provide a definition of 'reasonable' resulted from the fact that 'reasonable doubt' is actually the framework, not the target system. We cannot define the toolkit. We *use* it to render a decision. For so long, we have confused the *explanans* (reasonable / context-relevant) with the *explanandum* (particular case). The seemingly insurmountable problem with our efforts to define it, was the fact that we have been conflating the surface features of our main procedural device and its internal structure, i.e. the rules for its use. Focusing on the former has urged us to move around in circles by providing nothing but linguistic refinements. We need to analyse instead the structure of justification that facilitates a microscopic analysis of the particular factual inferences required for a warranted knowledge claim such as 'The defendant is guilty'.

[5] See e.g. *State v. Dauphinee*, 121 Pa. Super. 565, at 590 (1936).
[6] *Commonwealth v. Webster*, 59 Mass. 295 (Mass. 1850).
[7] *Bourhill v. Young* [1943] AC 92 (per Lord Wright).

According to the justification model proffered here, the SoP is not a function of the degree of probability, but of the cardinality of the SED which expands or contracts. The same proposition (e.g. getting wet) may be irrelevant in one context but becomes relevant in a different one where e.g. a new-born baby should at all costs remain dry – so that we need to rule out the possibility of rain. The element that shifts from context to context is not the grade of probability – the probability of sunshine remains the same in both cases. It is the new defeater which has now been introduced to the SED due to the (increased) importance of the probandum – and vice versa.

'Reasonable' is simply the visible top of an iceberg of epistemic practices, sharing the same structure, i.e. the contraction and expansion of the SED. By conceptualizing our epistemic practice in the context of contested criminal proceedings, we do not provide a static solution to an allegedly intractable equation, i.e. *the* meaning of reasonable, but describe, instead, a dynamic process: an adaptive structure of justification. Reasonableness is not asserted when an accurate definition is given but when a certain kind of epistemic behaviour is followed. *IC* provides us with justificatory patterns by projecting onto the world the epistemological vocabulary through which we can deliver a full-blown theory of legal evidence. This theory can facilitate an indefinite recontextualization of proof in criminal adjudication triggered by social change. But this has to do with a surface feature (open texture) of a context-sensitive concept, not with the stability of our procedural devices.

Most importantly, my model does not interfere with the internal operations of the respective legal order since its normative structure can smoothly incorporate any values. Its structure is perfectly compatible with frameworks where decisions are made under uncertainty. Truth is a surface feature of warranted beliefs, not vice versa. The model explicitly allows for non-epistemic factors to be considered, economic or otherwise. Last but not least, the model is compatible with decisions whose propositional content contradicts each other. What has to be regarded as adequately justified in a given inferential content is not good enough in a more demanding context.

4.2. SED versus Standard Model

The pivot on which epistemic agents swing is the SED and not the scale of numerical probabilities vis-à-vis grades of belief. This runs counter to the Standard Model in the law of evidence whose central feature is the concept of (aleatory) probability. The epistemic practice that produced aberrations (incl. paradoxes) from the point of view of the Standard Model produces consistency from the perspective of a contracting and expanding SED. Fact-finders do not calculate probabilities. Their task is to assign the terms reasonable / context-relevant to various doubt-claims and error possibilities which, accordingly, do or do not gain membership to the SED. My model has, I think, far more explanatory power with regard to our epistemic practice.

5. Final Remarks

We turned to epistemology for an elevated understanding of epistemology and evidence. The main question a theory of evidence has to answer is at which point the process of knowledge claim validation can come to an end. The SED is more complex than a rigid and rather naive epistemic (numerical or otherwise) threshold for each type of adjudication. Crucial is the question of which error possibilities (doubts) will gain membership to the SED. With regard to the allegedly appropriate cardinality of the SED, my model remains silent. It offers only a *structural* analysis of the SoP. Each legal system can embed its own values and determine what counts as loss/gain. What is more, these considerations are not external to the justificatory framework but part and parcel of the underlying structure.

Chief Judge Newman suggested in his Madison Lecture that we should "move beyond" the reasonable doubt standard, not by replacing it but by doing more than merely verbalizing it in jury instructions (Newman 1993: 990). The present paper moves, I think, in this direction. The question about the nature of the inquiry (applied epistemology or theorized practice?) is deep albeit irrelevant, for no theory per se could interfere with or invalidate the internal structure of a valid and functional legal order. Lacking the *theoretical* vocabulary for an epistemic *practice* does not render the latter unworthy or invalid. However, articulating what we already *do*, will enable us to refine our practices and instruct fact-finders about what they should do, in a more efficient and comprehensible way.

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