

EPISTEMIC AND PRACTICAL CONCERNS:
WHEN YOU CAN'T MEET BOTH*
(Draft December 18, 2013)

A realidade
Sempre é mais ou menos
Do que nós queremos
(F. Pessoa)

1. *Introduction*

In our life we often, if not always, face epistemic and practical concerns at the same time. By “epistemic and practical concerns” I mean concerns about knowledge and action respectively: it happens that we need to learn something and at the same time we need to save some utility (typically, time and money) for other important things; or, conversely, it happens that we need to achieve a certain practical goal (including, if you want, saving time and money) and we also need important information to achieve that goal (information that will cost time and money, to be sure). Our life is replete with situations of that sort. For instance, I need some information to achieve a scientific work tonight and at the same time I need to rest and sleep in order to teach tomorrow; or, conversely, I want to achieve excellence in teaching and I won't get it if I don't gather some data that concern the subject I teach (that is, if I don't invest my time and money on that search instead on other things).

To put it differently, we pursue epistemic ends that require practical means, and practical ends that require epistemic means. Fortunately this is not troublesome in many situations, when one of the things at stake is perceived as important and the other is not (or when there is a big difference in their degrees of importance). That sort of intertwining of epistemic and practical concerns becomes a dilemma when (i) both things are important, (ii) you can't get both at the same time, and therefore (iii) you have to sacrifice one thing for the other. Either you get the information you are searching for, and you sacrifice some utility to get it, or you save the utility and don't get the information. Either you pursue the practical goal you wish to achieve, and you search for the needed information, or you abstain from the search and don't achieve the goal.

This is true not only of our individual and everyday life but also of our social and institutional contexts. We often face concerns that pull in different, or even opposite, directions and we need to make choices as to the ends and means we care more about, both in our individual and social experience. Of course, in our individual life we are the only judges of what is worth pursuing and how to get it, whereas in social contexts there usually are explicit or implicit social rules that guide us in addressing those dilemmas; as a consequence, in our social experience what is worth pursuing, and how to get it, is not a matter of individual choice but the outcome of a social procedure, or the outcome selected by a rule that is accepted in the relevant context. In this paper I will address an example of this: a legal rule that, facing that sort of dilemma, favors a practical concern over an epistemic one.

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Before presenting and discussing my example, let me say that the contemporary philosophical literature is less interested than it should be in this kind of matters. The vast majority of our epistemological works does not take into consideration the practical aspects of knowledge and doesn't even count action amid the sources of knowledge¹. On the other hand, many writers in practical and moral matters seem to be scarcely interested in the epistemic aspects of practical life². So I think that a pragmatist attitude is very welcome here. For, as the classic pragmatists taught us (James in particular), it is utterly artificial to separate the epistemic from the practical aspect of our life, even if it is good to distinguish them analytically. The crucial point is that philosophy is not only a distinction-making affair: it is also the enterprise of arriving at a complex understanding of ourselves and our place in the world, articulating its different aspects.

2. *The Rule on Subsequent Remedial Measures*

I take legal rules to be a species of social rules. For sure the former have some specific features that distinguish them from other species of the latter, but I am not interested in discussing those features here. Rather, I would like to address a legal rule that exemplifies the dilemma outlined above: a situation in which we can't meet both our epistemic and practical concerns at the same time and we need to make a choice between them (or apply an already made choice, that is, apply in a particular case a choice made in general).

The rule I refer to is part of the Federal Rules of Evidence (FRE), a sort of legal evidentiary code that was enacted in 1975 and regulates the matters of proof and evidence in the federal courts of the U.S. (A quick historical note: many of those rules are not *ex nihilo* creations but restatements of traditional common law rules and principles in such matters). Before discussing my example, I need to spend some words on the rules of evidence and the structure of a legal trial³.

The legal rules of evidence can be conceived, in the context of the U.S. legal proceedings, as rules that structure the epistemic process of factfinders and of jurors in particular. Factfinders need to know what happened in order to deliberate on it, and such rules structure the way in which they get the relevant information. In this sense those rules belong to the domain of social epistemology⁴ dealing with belief transmission and inculcation in social settings. The rules have in general an epistemic rationale, for they provide the factfinder with the relevant information about the case in hand. It is disputed in the literature whether the appropriate attitude of a factfinder is knowledge (as justified true belief, typically), or rather something less ambitious as justified belief, or something quite different as acceptance⁵. I have claimed elsewhere that knowledge is the correct attitude, and so I will assume here⁶. According to this understanding the rules have in general a "veritistic" purpose⁷. But some of them (for example FRE 407-411) are not meant to facilitate the discovery of truth or the transmission of knowledge, but to carry out various policy objectives like reducing accidents and avoiding litigation.

¹ Cf. e.g. Pollock (1974), Chisholm (1977), BonJour (1985), Haddock, Millar & Pritchard (2010).

² Cf. e.g. Raz (1978), Korsgaard (1996), Shafer-Landau & Cuneo (2007). Of course there are significant exceptions to those trends. One is Papineau (2003), who articulates knowledge and means-end reasoning, and conceives of probability and causation as a guide for life. This is very pragmatist in spirit.

³ In the following paragraphs I significantly borrow from Leiter (2001). See also Allen & Leiter (2001); Anderson, Schum & Twining (2005).

⁴ See Goldman (1999). Cf. Goldman (2005).

⁵ See e.g. Ferrer (2006) and Pardo (2010).

⁶ See Tuzet (2013).

⁷ I borrow the term "veritistic" and its use from Alvin Goldman. See also Goldman (1991, p. 120) who thinks that *some* epistemic paternalism is justified from a *veritistic* point of view, in terms of the likelihood of getting truth and avoiding error, even though there are also non-epistemic reasons that should be considered (for instance the practical significance of an issue) in justifying an amount of paternalism in communication control.

The one I address is Rule 407, which is about “Subsequent Remedial Measures” (SRM). The rule emerged as a common law evidentiary rule during the mid-nineteenth century, under the pressure of technological innovations and injuries deriving from them; then it was codified in 1975; now it is adopted by almost every state in the U.S.⁸. This is the text of the rule (as amended in 2011)⁹:

When measures are taken that would have made an earlier injury or harm less likely to occur, evidence of the subsequent measures is not admissible to prove:

- negligence;
- culpable conduct;
- a defect in a product or its design; or
- a need for a warning or instruction.

But the court may admit this evidence for another purpose, such as impeachment or – if disputed – proving ownership, control, or the feasibility of precautionary measures.

What is the purpose of the SRM rule? It is designed to reduce accidents, because it says that evidence of remedial measures taken after an accident is not admissible to prove negligence, culpable conduct, a defect in a product or its design, or a need for a warning or instruction. In principle, at least, the rule should reduce accidents because it encourages defendants to take remedial measures after an accident occurred. If such measures were admissible as evidence against the defendant, so the argument goes, he or she would be far less willing to take them¹⁰. From an analytical point of view the inference that the rule wants to avoid goes first from the knowledge of such measures to the defendant’s belief about the risk of injury, then from that belief to the risk itself, and finally from the risk to the defendant’s liability¹¹. In sum, there is a practical concern (reducing accidents) that is preferred over the epistemic one of finding out in a concrete case (at least with this kind of evidence) whether the defendant was negligent, whether his or her conduct was culpable, etc. To quote Robert Summers, this is “the price we pay for having a complex multi-purpose system in which actual truth, and what legally follows from it, comprise but one value among a variety of important values competing for legal realization”¹². The FRE may be understood as falling into three overlapping categories¹³: 1) rules adapting the general principles of proof to the legal factfinding context; 2) rules designed to regulate the probative process by identifying improper prejudicial effects that may result from admission and use or particular kinds of evidence and requiring courts to weigh probative value and prejudicial effects; 3) rules that require the exclusion of evidence, based upon policies that override the importance of establishing truth. Rule 407 is among those of the third category. Notice, however, that such evidence can be used for other purposes according to the second part of the rule, but I won’t deal with this here.

On the other hand, there are rules that are designed to meet both epistemic and practical concerns, as is the case with the inadmissibility of coerced confessions. Is the SRM rule also capable of maximizing veritistic value? Such a double rationale pertains to the coerced confession exclusion

⁸ Cf. McManus (2003, p. 240). One disputed point was whether it applied only to negligence actions or also to strict liability cases: in 1997 the rule was amended to establish that it applied to both, but some states still have similar rules that apply only to negligence actions.

⁹ Also the other FRE I will quote in the paper are in the 2011 amended text.

¹⁰ “The primary concern is that the admissibility of such evidence would, by discouraging repairs, increase the risk of future accidents” (Posner 1999, p. 1485). Cf. Posner (1990, pp. 205-206).

¹¹ “When a person alters a condition or object that caused an injury and the change could make future injury less likely, one possible inference to draw from the remedial action is that the person who made the alteration believed that the object or condition before the alteration posed an unreasonable risk of injury. If we know that the person responsible for the object or condition has this belief, it is more likely that the object or condition did create an unreasonable risk of injury than if we knew nothing about the person’s belief” (Allen et al. 2011, p. 328).

¹² Summers (1999, p. 511). Cf. Posner (1990, p. 206): “I do not mean that the American system is uninterested in factual truth, but only that the goal of truth is in competition with other goals, such as economy, preserving certain confidences, fostering certain activities, protecting constitutional norms”. See also Anderson, Schum & Twining (2005, pp. 84-85); Twining (2006, p. 199). Cf. Gascón (2010, p. 120) referring also to European continental systems.

¹³ Anderson, Schum & Twining (2005, p. 299).

rule, because it excludes a coerced confession to protect the fundamental rights of the individual but also to leave out of trial such dubious evidence as a coerced confession (for a guilty person who confesses in order to stop or avoid being tortured it is likely there is also an innocent who, to the same end, “confesses” what he or she did not). But the SRM is apparently different. There seems to be no veritistic rationale behind it: it has a policy reason undermining the search for truth¹⁴. Therefore, according to the framework I outlined above, this rule ought to be taken as an example of a social rule that favors a practical concern over an epistemic one. However, the legal and philosophical conclusions we can draw from an examination of that rule are more subtle than it may appear at first sight. Let us consider in more detail the purposive features it has.

3. *The Rationales of the Rule*

To be precise, the rule doesn't have a rationale but two. If we look at the accounts given of it in textbooks we find, for instance, that such evidence “tends to cause a high degree of unfair prejudice, while contributing little probative value”, and we read that admitting it “creates a perverse incentive for defendants”¹⁵. Here are some examples:

Sometimes after a plaintiff is injured, the defendant attempts to make conditions safer. If a plaintiff slips on the defendant's icy sidewalk, for example, the defendant might start putting salt on the sidewalk. Or if a plaintiff gets her harm caught in a factory machine, the manufacturer of the machine might change the machine's design to prevent future accidents. Evidence that the defendant made such a change is relevant to prove the plaintiff's case; the change tends to prove a fact of consequence, that the original condition or practice was unreasonably dangerous¹⁶.

Such evidence is relevant, but two problems emerge with it: a) it constitutes a disincentive for defendants wondering about remedial measures; b) there is the risk that juries give it too much weight. These problems are amplified by the fact that “measure” is given a very broad reading.

Putting salt on an icy sidewalk clearly is a measure. So is changing the design of a product that caused an injury. When a car manufacturer responds to gas-tank explosions by switching the tank's location, that is a measure. Adding a warning label to a product or changing an existing label is also a remedial measure. [...] Taking products off the market or issuing recalls are also measures that fall within Rule 407¹⁷.

In fact, after an accident, a defendant has basically two possibilities: leaving the condition as it was, or take steps to improve it. But there is the risk that the second option will be used to support the plaintiff's case.

Suppose that a plaintiff trips over a loose floorboard in the defendant's residence and suffers an injury. After being made aware of the plaintiff's injury, the defendant has two basic choices: (1) he could leave the floorboard

¹⁴ A different response to the worry is also possible, of course: take SRM into consideration but give them less importance than other kinds of evidence. But if you don't trust jurors, you would better keep the rule. Alternatively, as we will see, we could let the judge decide, in case-by-case evaluation, whether the evidence is admissible.

¹⁵ Merritt & Simmons (2012, pp. 88-89).

¹⁶ Merritt & Simmons (2012, p. 89).

¹⁷ Merritt & Simmons (2012, pp. 91-92). On the other hand “subsequent” is given a less broad interpretation. “Defendants sometimes invoke the rule to protect remedial measures taken after sale of a product to the plaintiff, but before the plaintiff's injury. The rule, however, shields only measures taken after the injury itself” (*ib.*, p. 93). Why? “Before a party has been injured, a potential defendant has sufficient motivation to make its products safe; by correcting dangerous defects, it will avoid both litigation and liability. The evidentiary rules need not give potential defendants any special incentive to act with care during this period. It is only after a potential plaintiff has been injured that a defendant faces conflicting pressures: Correcting a dangerous defect may avoid future injuries, litigation, and liability, but making that correction immediately might compromise the defendant's interests in any lawsuit filed by the injured party” (*ib.*, p. 94). Cf. Allen et al. (2011, p. 328).

in its dangerous condition, thus risking additional injuries to others; or (2) he could repair the floorboard to avoid similar accidents in the future¹⁸.

The evidence of the repair is “unquestionably relevant”; on the other hand, “it is in the best interest of society for these repairs to be made so as to minimize the likelihood of future unfortunate incidents” and defendants should not be discouraged to make them; so FRE 407 promotes “an external social policy of encouraging such measures to be taken”¹⁹.

In particular, since among others the ruling of *Columbia & Puget Sound Railroad Co. v. Hawthorne* (1892), admitting such evidence has been considered to be a disincentive to responsible social behavior because “the prejudicial and confusing effects of subsequent remedial measure evidence, when coupled with an exclusionary rule’s positive impact on social behavior, outweighed the evidence’s marginal relevancy”²⁰.

So if we look closely at this matter we realize that there are several alleged reasons for excluding such evidence: (a) it is of limited relevance; (b) it is often mistaken by juries as an admission of culpability; (c) it tends to unduly prejudice defendants; and (d) it discourages persons from taking action to prevent future harm²¹. There is no single rationale behind the rule, even if the practical concern is more apparent than others. Similarly, Ron Allen and other scholars list four rationales of the rule: (i) low probative value; (ii) danger of misleading the jury; (iii) danger of discouraging desirable conduct; and (iv) interest in not punishing desirable conduct²². This is very good food for scholarly thought, but, avoiding subtle specifications, to exclude such evidence courts generally refer to 1) a “limited relevancy rationale” and 2) a “public policy rationale”²³, and it is the combination of the two that is taken to justify the exclusion of some such evidence. If this is correct, there is a combined effect of both rationales, at least in negligence actions and, plausibly, also in strict liability actions (where plaintiffs would like to include such evidence to prove a defect in a product).

To appreciate this combination of rationales we need to understand something more about the concept of legal relevancy and the exclusion of relevant evidence. There is a very important rule, FRE 403 (*Excluding Relevant Evidence for Prejudice, Confusion, Waste of Time, or Other Reason*), that sets the conditions for excluding relevant evidence, asking the judge to strike a balance between probative value and some specified dangers:

The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence (Rule 403).

This rule can be construed as a cost-benefit formula²⁴, but the wording of the rule does not say how the balance should be struck, and the “substantially” rider in it is hardly quantifiable; so scholars say, understandably, that “Rule 403 gives a tremendous amount of discretion to trial judges”²⁵. However, when is evidence relevant? This important premise is stated by FRE 401 (*Test for Relevant Evidence*):

Evidence is relevant if: (a) it has any tendency to make a fact more or less probable than it would be without the evidence; and (b) the fact is of consequence in determining the action (Rule 401).

¹⁸ Behan (2012, p. 110).

¹⁹ *Ib.*

²⁰ McManus (2003, p. 241).

²¹ McManus (2003, p. 241).

²² Allen et al. (2011, pp. 332-333).

²³ McManus (2003, p. 242).

²⁴ Cf. Kaplow (1980, p. 1789) and Posner (1999, pp. 1522-1523).

²⁵ Behan (2012, p. 113).

Now we can reconsider the two main rationales of the SRM rule. The first is the (limited) *relevancy rationale* in addition to the balancing check prescribed by Rule 403: such evidence as evidence of remedial measures raises the risk of unfair prejudice, it is claimed, and does not prove that the defendant knew or should have known of the prior dangerous conditions²⁶. “The conduct of one who repairs an object that causes an accident is consistent with both an innocent accident and negligence”²⁷. The second is the *policy rationale* (or, as it is sometimes put, “extrinsic policy rationale”, where “extrinsic” refers to the impact of the rule outside the courtroom)²⁸. “Proponents of the rule argue that people would be less likely to repair dangerous conditions following an accident if they believed that the repairs would be used as evidence against them. By removing this disincentive, courts encourage people to act responsibly and repair dangerous conditions”²⁹. In this sense, the rule is designed to make the world a safer place.

Now, from a philosophical perspective it is interesting to point out the numerous assumptions hidden in the rule. There is, first, some conception of probability, which many scholars take to be a Bayesian one (in connection to Rule 401) but others strongly dispute³⁰. Notice also the counterfactual inference in the rule: had such measures been taken previously, the harm would have been less likely³¹. And note that the core of the reasoning is the same as in the ascription of liability for an omission³²: had the defendant not omitted to take precautions, the harm would have been less likely. In relation to Rule 403 there is also the assumption that probative value can be measured in some way and balanced against such dangers like unfair prejudice. There are, finally, some assumptions on the efficacy of the rule (its capability to guide human behavior) and, on the background of it, some assumptions about human behavior as it would be without the rule (counterfactuals again). Let me expand a bit on the latter point. Without the rule, it is claimed, defendants would be reluctant to take remedial steps given the danger that these will be used against them in proving their liability; plaintiffs, conversely, would be willing to use evidence of remedial measures to prove the defendants’ negligence or the products’ defects; and jurors would be inclined to overestimate the probative value of such evidence, given their lack of competence. These are behavioral dispositions that in fact, according to some critics, amount to simple intuitions that lack a significant empirical support; at best, they are one part of the story, not the whole of it. What makes them plausible, in the case of defendants and plaintiffs, is the connection to their respective interests: given that parties want to win their case, they are disposed to behave in the most effective way to that end³³. But that is a very general assumption that does not take into account the situated features that might change those dispositions; moreover, it is partial in neglecting some other behavioral dispositions possibly triggered by the rule, as we will see in the following.

²⁶ “In addition to serious prejudice issues, evidence of the subsequent repair has little probative value because it does not tend to establish that the defendant knew or should have known of the dangerous conditions existing prior to the time of the accident” (McManus 2003, p. 243).

²⁷ McManus (2003, p. 244). This goes back to *Sappenfield v. Main Street & Agricultural Railroad Co.* (1891).

²⁸ Cf. Falknor (1956, pp. 590-592) on “remedial measures after an accident”.

²⁹ McManus (2003, p. 244), who also claims there is no disanalogy between negligence and products liability cases (p. 245).

³⁰ See e.g. Allen & Pardo (2007) for a critique of legal Bayesianism and, more in general, mathematical conceptions of juridical proof. But see Goldman (2002) for a “quasi-objective” form of Bayesianism avoiding the drawbacks of its subjectivist forms.

³¹ The issue of counterfactuals in legal reasoning is usually raised by the appeal to counterfactual legislative intentions (see e.g. Stoljar 2001). But the present discussion shows it is not limited to that.

³² Cf. e.g. Varzi (2007) and Tuzet (2010).

³³ As to jurors, instead, the assumption is given plausibility by the further assumption that jurors are generally incompetent and prone to fallacies. Cf. Goldman (1991, pp. 117-118) on “epistemic paternalism”, in which courts engage to avoid incorrect verdicts by juries that are not able to assess certain evidence correctly (because they overestimate or underestimate its probative value). But that is not beyond dispute; on the contrary, some scholars think that the jury trial works fairly well, or at least better than other conceivable systems (see Allen 1994, pp. 627-629).

4. A Critique of the Rule

In a recent paper Dan Kahan criticizes the economic justifications usually advanced on behalf of the ban on SRM evidence: the conventional economic defense ignores the negative effect that banning SRM evidence has on incentives to take precautions *ex ante*, and the behavioral economic rationale fails to balance the risk of false positives (due to the hindsight bias in jurors)³⁴ with that of false negatives (due to the ban). For these reasons Kahan supports a case-by-case evaluation (along the lines of Rule 403) instead of a categorical ban.

In the critical part of his argument he starts by considering the explanation and justification of the rule that is given, first, by conventional law and economics and, more recently, by behavioral economics.

By eliminating the prospect that steps to reduce future accidents will be used to prove liability for past conduct, the SRM rule, according to conventional law and economics (CLEC), removes a disincentive to behavior that promotes social wealth. [...] Behavioral law and economics (BLEC) buttresses the case for the rule by adding that it prevents the factfinder from indulging “hindsight bias”: Once the factfinder learns that a party adopted a particular remedial measure *ex post*, it will be psychologically impelled to overestimate how readily the utility of such a measure could have been predicted *ex ante*³⁵.

Remember the weighing assessment required by Rule 403 (probative value on the one hand and unfair prejudice and other dangers on the other) and note that in the context of the FRE there are some *categorical* exclusions besides, as the one in Rule 407: “the types of proof specified by the categorical exclusion rules are understood to involve such low degrees of likely probative value and such high degrees of likely prejudice that case-specific balancing can efficiently be dispensed with”³⁶. Why such high degrees of possible prejudice? Because of the “hindsight bias”, it is claimed, which “refers to the tendency of individuals to form an exaggerated assessment of how easily some contingency (a surprise attack by an invading army, say) could have been predicted once they learn it actually occurred”³⁷. In the context of SRM, a factfinder (a juror in particular) who learns of a SRM could easily overestimate the foreseeable utility or reasonableness of that measure before the accident, disregarding the (plausible) exculpatory scenarios consistent with *ex post* adoption of the measure. This constitutes, according to the conventional theory, a significant disincentive for defendants to adopt remedial measures after an accident, out of fear of liability.

But the argument is not conclusive, according to Kahan: “the argument neglects to weigh the benefit of preventing the factfinder from giving too much weight to SRM proofs against the cost of constraining it always to give them *too little*, as necessarily happens when admittedly relevant evidence is excluded”³⁸. In fact

hindsight bias does not necessarily justify categorical exclusion of SRM proofs. Excluding such evidence means that the law will necessarily get the wrong result – a finding of no liability when the defendant was in fact negligent or otherwise faulty – in some class of cases³⁹.

³⁴ On the hindsight bias (overestimating the accident’s likelihood and the measure’s utility once we know that the accident occurred and the subsequent measure was taken) cf. Posner (1999, p. 1527 ff.) and Rachlinski (1998).

³⁵ Kahan (2010, p. 1617).

³⁶ Kahan (2010, pp. 1620-1621). “Like the other categorical exclusion rules, the SRM ban reflects a determination that the prejudice associated with such evidence is highly likely to outweigh whatever probative value it might have” (*ib.*, p. 1622).

³⁷ Kahan (2010, p. 1623). “Rule 407 may be designed not only to reduce the cost of accidents by encouraging remedial measures but also to combat hindsight bias – what in prospect may have been highly unlikely may in retrospect appear to have been inevitable” (Posner 1999, p. 1527).

³⁸ Kahan (2010, p. 1631).

³⁹ Kahan (2010, p. 1635).

Moreover the case for categorical exclusion “rests on untested (and likely untestable) empirical premises about the respective error costs associated with admission and exclusion of SRM proofs generally”⁴⁰. Therefore Kahan suggests to dispose of such evidence in the same manner as required by Rule 403, that is, weighing the probative value against the risk of unfair prejudice or other dangers, in a case-by-case evaluation. So it would be a matter of “selective exclusion” (when the danger of prejudice outweighs the probative value) instead of a categorical one.

In sum, according to Kahan, the conventional economic account of the SRM rule indulges untested empirical premises and, in any case, “suffers from a remarkable, and remarkably obvious, flaw: It is wholly one-sided in considering the behavioral incentives of an SRM ban”⁴¹. It considers only the possible costs of admitting such evidence for ex post measures and neglects the costs of diminishing incentives to take reasonable ex ante measures. Both are socially relevant.

There is necessarily a tradeoff, then, between the societal benefit the SRM ban confers by removing a disincentive to adopt protective measures ex post, on the one hand, and the societal cost the rule imposes in diminishing incentives to adopt reasonable protective measures ex ante, on the other. The CLEC account never even mentions this tradeoff, much less furnishes us with empirical evidence that making it in favor of the ex post approach enhances net societal welfare⁴².

In addition, as we saw, the behavioral economics rationale is flawed too since there is poor empirical confirmation of the fact that jurors would be inclined to overestimate such evidence. The same point was raised some years ago by Richard Posner, who said that the evidence of the hindsight bias on mock jurors in certain empirical studies was “limited and also weak” because of the flaws in those studies, and pointed out that it is not unreasonable to believe that what appears to be hindsight bias is “really just a difference in substantive standards” of liability⁴³.

However, what would be the consequences of a case-by-case evaluation as recommended by Kahan? Would defendants have incentives or disincentives for making repairs? In fear of admissibility of repairs evidence, they might prefer not doing them. But if expected costs of litigation and liability for future similar accidents would outweigh the costs of the past accident, they would be likely to make such repairs anyway. So, it probably depends on the kind of accident and repair.

5. Some Pragmatist Remarks

This is not the place to assess the rule and claim that a case-by-case evaluation would be better (as Kahan has it) or worse (as the defenders of the rule maintain). I want to draw instead some theoretical and pragmatist conclusions from the preceding discussion and focus on the tradeoff between epistemic and practical concerns.

The first conclusion is that the rule has a combined rationale, with an epistemic component (avoid the hindsight bias) and a practical one (encourage defendants to take remedial measures). As to the epistemic component the rule is similar to the coerced confession exclusion rule: what is

⁴⁰ Kahan (2010, p. 1639). “The rule depends on assumptions regarding how the presence or absence of the rule affects or would affect behavior – i.e., that the rule encourages people to make conditions safer and that its absence would deter such behavior – but we do not have reliable information about whether the rule actually produces or would produce these effects” (Allen et al. 2011, p. 344).

⁴¹ Kahan (2010, p. 1642). “As a result of the SRM ban, parties can anticipate that they will be shielded from a damaging form of evidence and thus face less expected liability for the failure to adopt precautions ex ante” (*ib.*).

⁴² Kahan (2010, p. 1642).

⁴³ Posner (1999, pp. 1528-1529). He finally says that the rule is “justified by the external costs of such evidence in reducing safety” and “may also be justified by concerns with hindsight bias, but these concerns seem exaggerated and in any event could be dealt with by other measures” (*ib.*, p. 1545). So the public policy rationale is sound, according to Posner, while the prejudice one is at least dubious. See also Laudan (2006, pp. 121-122) on the lack of empirical evidence about jurors’ biases.

epistemically disputed is the best way to arrive at the truth of the matter, and according to this reading of the rule the best thing to do is exclude such evidence given the prejudicial effect it has on jurors. As to its practical component, instead, the rule is different from purely “veritistic” rules (if they exist) because it faces a different issue, that is, whether it is good to exclude some information to achieve a practical goal. In both ways of addressing the issue, the categorical ban and the case-by-case exclusion, we face a dilemma: *either* we pursue the epistemic goal of finding out the truth, and we admit the SRM evidence, but run the risk of discouraging ex post remedial measures, *or* we pursue the policy of encouraging such measures, and exclude the SRM evidence, but run the risk of undermining the ascertainment of truth. To be clear, I am not claiming that one option is better than the other, and I don’t want to strike any balance here; my point is simply theoretical, that is, to advance the understanding of this matter.

The second conclusion is that the previous considerations might be not very surprising for the pragmatists thinkers who know and appreciate William James’ insights about the complexities of our individual and social life. Against what simple-minded thinkers might believe, for James the ascertainment of truth is neither an absolute duty nor a goal that trumps every other policy or practical consideration.

In § VII of *The Will to Believe* (originally published in 1896) he points out the two “great commandments” of our epistemic life: 1) know the truth; 2) avoid error⁴⁴. James notes that they are “two materially different laws; and by choosing between them we may end by coloring differently our whole intellectual life. We may regard the case for truth as paramount, and the avoidance of error as secondary; or we may, on the other hand, treat the avoidance of error as more imperative, and let truth take its chance”⁴⁵. Our feelings of duty about either truth or error are “only expressions of our passional life”, and Clifford’s famous proscription (it is always wrong to believe anything upon insufficient evidence) is like “a general informing his soldiers that it is better to keep out of battle forever than to risk a single wound”⁴⁶. In fact it is the context, and the contextual interests and stakes, that decides which commandment comes first:

in human affairs in general the need of acting is seldom so urgent that a false belief to act on is better than no belief at all. Law courts, indeed, have to decide on the best evidence attainable for the moment, because a judge’s duty is to make law as well as to ascertain it, and (as a learned judge once said to me) few cases are worth spending much time over: the great thing is to have them decided on *any* acceptable principle, and got out of the way⁴⁷.

The reference to law courts is significant, even if James does not distinguish between criminal and civil trials: in the former it is much more important to avoid (a certain kind of) error than in the latter, given the more egregious practical consequences of a criminal decision for one’s life. I would say that in criminal trials the first commandment is “avoid error” (false positives in particular) whereas in civil trials is “know the truth”. Analogously, in some scientific activities like medical research it is much more important to avoid certain errors (given their practical consequences) than it is in other branches of science like astrophysics. The point could be generalized to the proposition that our epistemic duties depend (at least in part) on what is at stake from a practical viewpoint.

In lecture VI of *Pragmatism* (originally published in 1907) James deals with the normative aspects of truth⁴⁸. He challenges the abstract idea that there is an absolute duty to discover the truth (any truth whatsoever) and claims that the normative properties of truth are connected to our desires and motivations.

⁴⁴ Now in James (1968, pp. 726-727). Cf. Chisholm (1977, pp. 14-15).

⁴⁵ James (1968, p. 727).

⁴⁶ James (1968, p. 727). Cf. Haack (1997).

⁴⁷ James (1968, p. 728). On distribution of error and criminal law see Laudan (2006).

⁴⁸ Now in James (1968, pp. 429-443).

Our obligation to seek truth is part of our general obligation to do what pays. The payments true ideas bring are the sole why of our duty to follow them. [...] Truth makes no other kind of claim and imposes no other kind of ought than health and wealth do. All these claims are conditional; the concrete benefits we gain are what we mean by calling the pursuit a duty. In the case of truth, untrue beliefs work as perniciously in the long run as true beliefs work beneficially⁴⁹.

Some truths are trivial (for instance that twice two are four) and others are practically irrelevant (the number of words in the books of my library for instance). Truth need be recognized only when it is expedient, claims James, and it should be relevant for the situation or the linguistic exchange⁵⁰.

Therefore, the third conclusion I would like to draw from the foregoing is that the tension between epistemic and practical concerns is much more widespread than it may appear at first sight. It is a feature not only of some social contexts but of life in general (as I anticipated at the beginning of the paper). This is even more evident if we count time and money among the practical concerns that influence our deliberation and conduct. The discovery of any truth whatsoever, and the gathering of any information whatsoever, requires an amount of time, small as it might be, and, if time is money, a correspondent amount of money; in certain cases it also requires additional money (to buy some documents, for instance, or to pay someone who collects them for you). So one has to invest that amount of time and money to get the needed information, or, to put it more dramatically, one has to sacrifice one thing for the other. That is also true of scientific inquiry if we think, with Charles S. Peirce, that there is an “economy of research” governing both the generation of hypotheses and their testing (and the latter in particular, since the former is already regulated by instinct, according to Peirce): “when it comes to the crucial process of checking and testing, we can deal with only a small number of possibilities, given limited time and limited resources. Owing to the economic exigencies of our situation, most of our candidate hypotheses must simply be put aside untested and even generally unconsidered”⁵¹. This is a general trait of our life, and theories of knowledge that do not take it into account are out of track; the same is true of theories of action or moral theories that do not take into account the importance of knowledge and information for our practical purposes.

Then, the fourth and last conclusion I am wondering about concerns the best way to conceptualize this complex matter. From the starting of this paper I have opposed epistemic and practical concerns. If my third and previous conclusion is correct, we always sacrifice some utility to get some information, while, on the other hand, we always need some information to achieve some goal. So one could think that the best way to conceptualize and understand these issues is to avoid the opposition of epistemic and practical concerns and claim instead that the gathering of information and the discovery of truth are among the practical goals of our life. The practical importance of knowledge is certain when knowledge is a means to a practical end. But the situation is not conceptually different when we deal with practical means to an epistemic end: an epistemic end is nothing but one of the possible ends of our individual and social life, and sometimes knowledge itself is a means to some other practical end (as in my starting example of gathering data to improve teaching). One of the great lessons of classical pragmatists (Dewey in particular on this point)⁵² is that many of our ends are means to further ends, and not only the choice of the ends determine what means are appropriate, but also the available means determine what ends are reasonably eligible. So knowledge can be a reasonable end when it is achievable at reasonable costs and has a practical value, being a means to some other end. The value of knowledge, to put it

⁴⁹ James (1968, p. 441).

⁵⁰ “If you ask me what o’clock it is and I tell you that I live at 95 Irving Street, my answer may indeed be true, but you don’t see why it is my duty to give it” (James 1968, p. 442). On truth and usefulness cf. Ramsey (1927-29, p. 93). On some related considerations by Peirce see Tuzet (2006). In the contemporary debate, see among others Pollock (1995) and Stanley (2005).

⁵¹ Rescher (1978, p. 66). Rescher claims that the Peircean economy of research permits to rule out some paradoxes or puzzles like Carnap’s requirement of total evidence, Hempel’s paradox of the ravens, Goodman’s grue paradox and some Popperian requirements such as generality-preference and likelihood-preference.

⁵² See in particular Dewey (1939). Cf. Haack (2005).

differently, is one among our values, not different in principle from love or friendship or justice. But the problem is, as the SRM example was purported to show, that not every value can be realized at the same time. The root of the problem is that, given the conditions of our life, it happens that the realization of one value conflicts with that of another, so that, in SRM cases, the ascertainment of truth can undermine a social policy or, vice versa, a social policy can undermine the ascertainment of truth. Irenic philosophers love to think that values do not conflict with one another, but pragmatists should be ready to admit it and explain it. And the explanation bedrock is constituted by the incompatible desires, or desires of incompatible states of affairs, that we happen to have. For thinkers who do not believe in values as such but conceive of value-talk as expressing subjective assessments, any “conflict of values” can be conceptualized as a conflict of “evaluations” and this can be explained as the upholding of incompatible desires. But this is a topic for another paper.

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