Gaps in the Evidence

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1 Introduction

This is uncontroversial about trial decision-making: disputes about matters of fact should be adjudicated in light of the evidence presented by the litigants. Suppose a plaintiff sues a shop owner because of an injury that occurred in the shop. The floor was slippery. The plaintiff tripped and fell. They had a concussion. They seek compensation for damages. This is the plaintiff's story. The shop owner disagrees. The plaintiff did fall and had a concussion—this is undisputed—but not because of the slippery floor. Plaintiff and defendant are disagreeing about a question of fact. What happened, exactly, when the plaintiff tripped and fell? Evidence must be presented by the litigants to resolve the dispute.

But there is a complication. Suppose the shop had cameras inside. When the plaintiff tripped and fell, the camera recorded what happened. The recording, if accessible, could unequivocally tell what happened. For some reason, however, the camera recording of that specific incident had gone missing. And, unfortunately, that day at that time no one else was in the shop. So there isn't much other evidence that could be gathered, except conflicting testimonies by the plaintiff and defendant. Merely based on the available evidence, then, the plaintiff would have a weak case and lose the lawsuit.

This outcome would be, in some important way, unsatisfactory. Why was the recording missing? The shop owner might have deleted it, fearing that the customer could sue them. If so, should the case be resolved in favor of the plaintiff even though the available evidence does not tip in their favor? Perhaps so. What if the recording was deleted *by accident*? Our intuitions might waver in this case. Setting aside how the case should be decided, the upshot here is this. For one thing, the evidence presented by the parties should guide trial decisions. For another, the fact that some evidence was *not* presented should also—in some circumstances—be considered evidence and thus guide trial decisions. To examine what these circumstances might be is the task of this paper. We call this the problem of gaps in the evidence or the problem of missing evidence.

Legal systems of adjudication contain rules for handling gaps in the evidence. These rules are elaborate, subtle, intricate. We are not cataloging these rules, nor offering a comparative study of how different systems of adjudication address the problem of gaps. Our aim here is modest—that is, to map out the conceptual terrain. The plan is as follows. Contrary to existing claims in the literature, Section 2 shows that missing evidence can be relevant evidence. Section 3 sketches how the law handles cases of missing evidence. We will examine a few paradigmatic examples of gaps in the evidence. We will draw from the case law of the United States, but we hope that our investigation can have a more general interest. Section 4 examines more closely the question of prejudice. The case law tends to focus on whether the missing evidence could have made a difference to the verdict (prejudice). We think, instead, that the question whether the missing evidence could have enhanced the accuracy of the decision-making process is more fundamental. This focus on accuracy need not be in tension with legal practice, however. Section 5 examine remedies for missing evidence, in particular, how epistemic and policy considerations can guide the formulation of these remedies. Finally, Section 6 identifies two central questions that should inform responses to missing evidence: first, whether the missing evidence would have enhanced the accuracy of the decision-making process; and second, whether the evidence is missing for fortuitous or non-fortuitous reasons.

2 Missing evidence is evidence

That some evidence had gone missing—say, that the recording of the customer's fall had gone missing—is itself a piece of information. It can be treated as evidence, that is, evidence that (some other) evidence is missing. The question is whether this evidence-missing evidence is relevant for adjudicating a dispute about a matter of fact. We will see that the answer is in a wide range of cases surely positive.

2.1 Balance of missing and available evidence

If the fact that evidence is missing is itself treated as an item of evidence, this information can contribute to the overall balance of the evidence. We borrow the expression 'balance of evidence' from J.M. Keynes (1921) to describe the outcome of weighing evidence for and against a certain hypothesis of interest. In general terms, the model we have in mind is the following. Suppose the balance of the evidence is quantified using a probability measure, such as that probability that the defendant is liable L given the available evidence E_a, or written in symbols, $\mathsf{P}(L|E_a)$. This account is incomplete, however. The

balance of evidence should also comprise facts about missing evidence E_m. So, following a suggestion by Kaye (1986), a more complete account would be the probability that the defendant is liable L given the available evidence E_a as well as facts about missing evidence E_m, or in other words, $\mathsf{P}(L|E_a \wedge E_m)$. Once such a probability can be assessed, it can be used further down the path of evidential reasoning. Kaye does not provide a method for how this task be carried out, leaving open the possibility that $\mathsf{P}(L|E_a)$ and $\mathsf{P}(L|E_a \wedge E_m)$ may actually turn out to be the same.

To make progress here, the key question is whether this evidence-missing evidence E_m is relevant evidence. Relevance is traditionally defined as the conjunction of (a) probative value and (b) materiality. Rule 401 of the Federal Rules of Evidence reads:

> 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.

So the question is whether $\mathsf{P}(L|E_a)$ and $\mathsf{P}(L|E_a \wedge E_m)$ can differ, or more generally whether $\mathsf{P}(H|E_a)$ and $\mathsf{P}(H|E_a \wedge E_m)$ can differ, where H is any material hypothesis.

The problem with missing evidence is that its content is unknown. For all we know, the video recording could have shown that the customer tripped and fell because of the slippery floor or for some other reason. Without knowing its content—some might argue—the relevance of missing evidence is essentially null. The following passage from Hamer (2012) makes this point:

> . . . if the evidence is missing it cannot be known which way it points. It appears equally possible that the missing evidence would confirm the current factual conclusion as contradict it. The competing possibilities cancel each other out. There is no warrant for the assumption that the missing evidence will point one way rather than the other. [p. 139]

This argument has some plausibility. But there are good reasons to question it. Indeed, missing evidence can point in two directions—in favor or against the defendant—but evidence does not exist in a vacuum. When it is part of a known causal structure, plausible inferences can be drawn about which way it *would have pointed* even without knowing which ways it does point. The opposite directions the missing evidence could have pointed need not always cancel each other out. The plausibility of Hamer's argument hinges on the assumption that facts about missing evidence occurred at random. When this assumption does not hold, facts about missing evidence are more likely on some scenarios than on others. The intuition that the direction in which missing evidence could point should balance out no longer works. We will make this point precise using a probabilistic model of missing evidence.

Before we move on, however, we should note that one need not subscribe to a probabilistic model of the balance of evidence. Whatever one's model, it will need to accommodate the evidential value of missing evidence. Consider, for the sake of illustration, another popular account of the balance of evidence: the theory of relative plausibility by Pardo & Allen (2008). On this account, the competing hypotheses under consideration in a trial—say the story put forward by the defense and the story put forward by the plaintiff—should be evaluated in light of how well they explain the evidence. So long as the evidence comprises both the available evidence and facts about missing evidence, the competing hypotheses should be evaluated in light of how well they explain the overall evidence, $E_a \wedge E_m$. There is no reason why facts about missing evidence could not themselves be the target of an explanation. So, on this account, the hypothesis that better explains the available evidence as well as facts about missing evidence would be explanatory superior to its rival. The exact details of this analysis should be worked out and we do not take up this task here. In what follows, instead, we rely on the probabilistic account because it can make precise the relevance of missing evidence.

2.2 Bayesian network model

To substantiate the claim that missing evidence can be relevant, consider more closely the somewhat simplistic but illustrative trip and fall case. The underlying causal structure can be modeled using a Bayesian network that comprises a graphical, qualitative part and a numerical part.[1] The graphical part consists of variable nodes, their values, and arrows between the nodes (see Figure 1). The *nodes* stand for event variables, such as the slippery floor (Slippery) and the defendant's attempt to destroy the recording (Interference), or evidence variables, such as the defendant's testimony that they fell because of the slippery floor and the video recording (Video). Each variable can take two or more *values*. The video variable can take three values since the recording could show the floor was safe (Video=safe),

[1] For an illustration of how Bayesian network can be used to model evidence in legal cases, see Fenton, Neil, & Lagnado (2013).

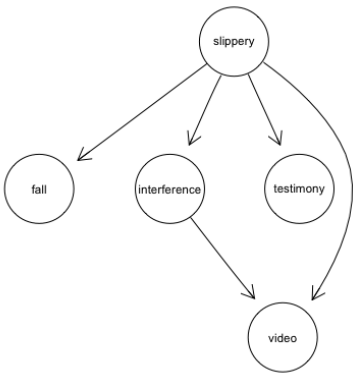

Figure 1: A direct acyclic graph for the trip and fall case.

dangerous (Video=dangerous) or the video itself could be missing (Video=missing). The other variables will take two values, say the floor was slippery (Slippery= yes) or not (Slippery= no), the interference happened (Interference=yes) or not (Interference=yes), and so on. Finally, the *arrows* represent relations of causal influence between variable nodes: whether the floor was slippery or not affects the content of the video; it also affects whether the customer fell or not; and so on.

These qualitative relations of causal influence can be quantified using probabilities. This is the numerical part of the Bayesian network, usually in the form of probability tables (see Table 1). Say, if the floor was slippery it is twice as likely that one would fall compared to when the floor was not slippery. Updating the network with the information that the customer fell makes the hypothesis that the floor was actually slippery more likely: the probability of the hypothesis goes from a stipulated 10% to 16% in our simulation. This accords with our intuitions. Consider now the possibility of interference. Say, if the floor was slippery, it is twice as likely that there would an interference by the owner than when the floor was not slippery. In addition, if there was an interference by the owner, it is extremely likely the video would be missing, even though the video could also be missing because of other, more fortuitous circumstances. Assume the likelihood the video would be missing under the interference hypothesis is nine times more likely than under the non-interference hypothesis. Given this 9:1 ratio, updating the network with the information that the video is missing makes the hypothesis that the floor was slippery even more likely: its probability goes from 16% to 26%.

These numbers are purely illustrative. Changing the ratio to 6:4—that is, the video could be missing for fortuitous reasons in 40% of cases—weakens the inference from the missing video to the conclusion that the floor was slippery. The hypothesis that the floor was slippery would now change from 16% to 22% probability. But, no matter the exact numbers, the missing video *is* relevant evidence—or more precisely, the fact that the video recording is missing is itself relevant information. Taking into account that the recording is missing increases the probability that the floor was slippery. This conclusion holds even though the content of the video remains unknown. The only case in which the missing video would have null value is if there is no relation between the slippery floor and the owner's interference—that is, if it was just as likely that the owner would attempt to remove the recording when the floor was slippery than when it was not.

2.3 Objections

The claim we are putting forward is that facts about missing evidence can—as in the trip and fall case—be relevant evidence. Some might resist this conclusion for the following reason. Cases of missing evidence do not usually contain direct evidence indicating that the fact of missing evidence is itself relevant. This is the very question that needs to be addressed and its answer cannot be presupposed from the outset. For example, even if the video recording is missing, this cannot be evidence that the owner attempted to destroy or alter the recording. Absent direct evidence that the owner attempted or had reasons to destroy the recording, the owner should be given the benefit of the doubt.

But, even though there is no direct evidence that the owner attempted to destroy the video, the fact of missing evidence is itself evidence that the owner attempted to destroy the video. This falls out of

	P(Slippery)	
	Slippery=yes	Slippery =no
	1/10	9/10
	P(Fall | Slippery)	
	Slippery=yes	Slippery =no
Fall=yes	2/3	1/3
Fall=no	1/3	2/3
	P(Interference | Slippery)	
	Slippery=yes	Slippery =no
Interference = yes	2/3	1/3
Interference = no	1/3	2/3
	P(Video | Slippery, Inference) - *first scenario*	
	slippery=yes	Slippery =no
	Interference=yes Interference=no	Interference=yes Interference =no
Video = safe	0 0	0 9/10 ‘
Video = danger	0 9/10	0 0
Video = missing	1 1/10	1 1/10
	P(Video | Slippery, Inference) - *second scenario*	
	slippery=yes	Slippery =no
	Interference=yes Interference=no	Interference=yes Interference =no
Video = safe	0 0	0 6/10
Video = danger	0 6/10	0 0
Video = missing	1 4/10	1 4/10

Table 1: Plausible probabilities for the Bayesian network about the trip and fall case.

the Bayesian network and the probability assumptions embedded in it. One might insist that even if, statistically speaking, whenever a recording is missing, it is more likely due to a deliberate action than an accident, this statistical regularity does not apply to the instant case. In fact, statistical regularities cannot tell us about individual actions. This observation is hard to make sense of, however. For information that a witness saw the defendant from far away is routinely used to weaken the credibility of witness identifications. This weakening rests on statistical regularities about decreasing levels of reliability in witness identifications as distance increases. But, perhaps, the objection underscore a different point. Available evidence can be scrutinized: a testimony can be questioned, challenged, tested during cross-examination. Missing evidence—or so the argument goes—cannot be scrutinized: it is an inert fact from which we cannot know anything more. So, facts about missing evidence cannot be given the same status as available evidence.

This line of questioning is well taken, but the distinction drawn here is more of a quantitative than a qualitative type. Existing psychological research challenges the assumption that cross-examination, at least as currently practiced, is an effective method for distinguishing between reliable and unreliable evidence: questions asked in an adversarial setting under stressful circumstances may result in a biased assessment of the reliability of the witness testimony. Furthermore, in principle there is no reason why one couldn't scrutinize the evidence about the missing evidence itself, say by questioning the shop's personnel about the data-management practices. This line of questioning could help to see how likely it is that the evidence went missing due to negligence rather than to ill will.

Still, we concede that facts about missing evidence often involve a greater degree of uncertainty—and ultimately, we think that such sort of uncertainty could be better modeled in terms of higher-order probabilities. Every item of evidence is characterized by at least two levels of uncertainty. There is a first-order uncertainty about the hypothesis that the evidence is intended to support, for example, it is more or less likely that a hypothesis is true given the evidence. In addition, there is uncertainty about the first-order uncertainty itself, for example, it is more or less likely that it is more or less likely that the hypothesis is true given the evidence. We think that facts about missing evidence usually carry a higher second-order uncertainty, compared to available evidence. We do not pursue this analysis here, however.

The fact that often there is more uncertainty about missing evidence does not undermine the claim that the missing evidence can be relevant, as we have shown. There may be overriding, non-epistemic reasons to ignore it, but its epistemic value is not necessarily null. To better understand the interplay

between epistemological and non-epistemological considerations, we now turn to how the law handles cases of missing evidence. This is our next topic.

3 Legal framework

The legal framework for dealing with missing evidence is informed by a number of questions. They pertain to the would-be-relevance of the missing evidence, its prejudicial effects, and the remedies that can be applied. Considerations about why the evidence is missing are also important.

> *Would-be-relevance* - Would the missing evidence if presented be relevant?
> *Prejudice* - Could the missing evidence make a difference to the decision?
> *Circumstances* - Why is the evidence missing? Was it an accident or misconduct? Did one of the parties have a duty to preserve the missing evidence?
> *Remedy* - What remedies should be granted to the litigant disadvantaged by the missing evidence?

The context here is that one of the litigants complains about missing evidence and asks for a remedy, say a missing evidence instruction, a sanction against the other party, retrial. The complaining party should make a case that the missing evidence is relevant and prejudicial, and also that a remedy must be granted that would be appropriate to the circumstances. These complaints are made because the other party failed to comply with a request to disclose information, documents and witnesses relevant to the case.[2]

3.1 Relevance and prejudice

At first blush, the first two questions can be understood as forming a flowchart. If the missing evidence is not relevant, the question of prejudice does not arise. If the evidence is not prejudicial, the other questions—especially the question of what remedies should be granted—does not arise. But this interpretation is overly rigid and needlessly algorithmic. These questions are better considered holistically. An understanding of the circumstances that caused the evidence to be missing will help to discern whether the evidence is relevant or prejudicial, and thus also select the appropriate remedy. It is helpful, though, for analytical clarity, to consider the first two questions separately.

The question of relevance here must be understood in a peculiar manner. As noted before, relevance is traditionally defined as the combination of (a) probative value and (b) materiality. But the question of relevance for missing evidence in the legal framework is not a standard question of relevance. It requires a judgment of *would-be* relevance. Missing evidence is evidence whose content is generally unknown. It could favor one side or the other side, say it could be incriminating or exculpatory. If the content of the missing evidence were known, the evidence would not be missing in the full sense. So, in order to meet the would-be-relevance test, the missing evidence—however its content turns out to be exactly—should strengthen or weaken the case of one of the litigants. More precisely, the party complaining about missing evidence must demonstrate

> "a relationship between the requested evidence and the issues in the case, and there must exist a reasonable indication that the requested evidence will either lead to other admissible evidence, assist the defendant in the preparation of witnesses or in corroborating testimony, or be useful as impeachment or rebuttal evidence." United States v. Curtis , 755 A.2d 1011, 1014–15 (D.C. 2000), cited in Buchanan v. United States, 165 A.3d 297, 304 (D.C. 2017).

And to put the requirement more clearly in terms of altering the balance of the available evidence:

> "The defense must show more than that the item bears some abstract logical relationship to the issues in the case. There must be some indication that ... the item would enable the defendant significantly to alter the quantum of proof in his favor." United States v. Jordan , 316 F.3d 1215, 1251 (11th Cir. 2003).

Short of that, any litigation about missing evidence should not even begin. The bar is high.

It might not always be clear whether the would-be-relevance test is met. For example, suppose the defendant is charged with illegal possession of firearm. The police legally searched the defendant's vehicle and found a firearm. The defendant had no permit. The police searches the rest of the car and finds a backpack, but does not retain all the items in the backpack: keys, pieces of paper, trash. The

[2] See, for example, Rule 37 (Failure to Make Disclosures or to Cooperate in Discovery; Sanctions) of Federal Rules of Civil Procedures and Rule 16 (Discovery and Inspection) of Federal Rules of Criminal Procedure.

defense complains that the evidence is incomplete: information about the contents of the backpack is missing. On one interpretation, the missing evidence seems irrelevant. The evidence available shows conclusively that the defendant was carrying a firearm without a permit. The exact content of the backpack does not make any difference.[3]

But the party adversely affected by the missing evidence—the defendant here—might object. What if an item in the backpack—say, the keys—could have indicated the backpack was not the defendant's?

> Counsel for appellant ... [suggested] that even if the defense team had been unable to locate the owner of the key, they could have tried the key at Howard's dwelling and demonstrated that it was not his. In other words, even if the defendant could not point the finger at any particular third party, he could present a theory that the backpack was shared. (Howard v. United States - No. 18-CF-157 District of Columbia Court of Appeals, p. 15)

So the keys could be exculpatory evidence. If they did not belong to the defendant, the backpack did not either, and neither did the firearm—or so the defense could argue. Perhaps this argument is sufficient to alter the balance of evidence and create a reasonable doubt. In this way, however, any missing piece of information—given a broad enough interpretation—can pass the would-be relevance test and potentially alter the balance of the existing evidence.

The response of the court to the defendant's argument is worth citing in full:

> "Appellant's argument is based entirely on speculation. It is, of course, equally plausible that the key was Howard's and that it would have provided additional evidence of his guilt. And though identifying the backpack as Howard's was important, the weapon was found underneath appellant's seat after officers watched him lean forward and then sit back up when he saw that the car was being pulled over. ... the exculpatory value of the key was wholly speculative ... there was additional evidence outside of the backpack linking the gun to Howard, and ... other evidence indicated that the backpack and its contents were indeed his" (ibid, p. 17)

How should we interpret the Court's reasoning? Perhaps, we need not split hair about the would-be-relevance test. Granted, the keys—under a plausible interpretation—could be relevant exculpatory evidence. But what matters is whether the missing (relevant) evidence could make a difference for the decision, in light of all other evidence available. If it cannot—even interpreted in the light most favorable to one of the parties—the question whether we should worry about the missing evidence is moot. In other words, the question of relevance becomes moot *absent prejudice*. So the first two questions of relevance and prejudice boil down to the question of prejudice: whether the missing evidence could tilt the scale in favor of the defendant so significantly that the verdict would turn around.

3.2 Circumstances and remedies

Let's now tackle the question of remedies. This question offers great latitude. An extreme remedy would be this: if the missing evidence is detrimental to the accused, the case should be dismissed. This remedy is excessive: it will create a perverse incentive for defendants to destroy evidence in their favor. The absence of evidence that could be in favor of the defendant would be enough to dismiss the accusation. Instead of presenting exculpatory evidence to be tested via cross-examination, defendants would prefer to destroy it. They would then argue they were prejudiced and should win the case. This arrangement makes little sense. Alternatively, such a remedy could apply only provided the party bringing the accusation was responsible for destroying the evidence favoring the defendant.

Remedies can also apply at the level of how the evidence is assessed, not directly to decisions. So, for example, the remedy could be this: the party responsible for the missing evidence and that attempted to benefit from this fact should have their case weakened by a quantum of evidential force proportionate to the extent to which the party sought to benefit by causing the gap. There are other possible formulations, for example, an adverse jury instruction to presume a fact obtained, where the presumed fact weakens the case of the party that, in bad faith, contributed to the destruction of the evidence.

Another approach would be to initiate a separate litigation for missing evidence. This might be more appropriate in criminal than civil cases. To penalize criminal defendants with adverse jury instructions because they destroyed evidence may clash with other well-established rights defendants have, such as

[3] Howard v. United States - No. 18-CF-157 District of Columbia Court of Appeals Link to case: https://www.dccourts.gov/sites/default/files/2020-11/Howard%20v%20United%20States%2018-CF-157.pdf

the right to be presumed innocent until proven guilty. At the same time, destruction of incriminating evidence must be negatively sanctioned. To this end, destruction or tainting of evidence relevant for criminal litigation can count as a wrongdoing in itself which can be litigated in a separate trial. This should provide the right incentive for people not to destroy evidence.

This survey of possibilities is not exhaustive. To get a sense for the broader array of remedies available, here is an excerpt from N.Y. Crim. Proc. Law § 245.80, 2 (Available remedies or sanctions):

> For failure to comply with any discovery order imposed or issued pursuant to this article, the court may make a further order for discovery, grant a continuance, order that a hearing be reopened, order that a witness be called or recalled, instruct the jury that it may draw an adverse inference regarding the non-compliance, preclude or strike a witness's testimony or a portion of a witness's testimony, admit or exclude evidence, order a mistrial, order the dismissal of all or some of the charges provided that, after considering all other remedies, dismissal is appropriate and proportionate to the prejudice suffered by the party entitled to disclosure, or make such other order as it deems just under the circumstances; except that any sanction against the defendant shall comport with the defendant's constitutional right to present a defense, and precluding a defense witness from testifying shall be permissible only upon a finding that the defendant's failure to comply with the discovery obligation or order was willful and motivated by a desire to obtain a tactical advantage.

3.3 Bad faith and adverse jury instruction

Given the wide range of possibilities, it is helpful to focus on a specific version of remedies that is quite paradigmatic: an adverse jury instruction against a party granted because of the party's bad faith. Often, if one of the parties destroyed evidence in bad faith, an adverse jury instruction is warranted against that party—say, presuming that the missing evidence was in fact unfavorable to that party.

Consider a more elaborate version of the trip and fall case at the start of this paper.[4] An accident occurs at Target, a chain of department stores in the United States. The customer slips, falls and gets injured in a Target store because of a flatbed, possibly left unattended. The customer suffers serious injury and is transported to a hospital. The customer sues Target and seeks to recover damages. However, video surveillance footage is only preserved in part. The rest is destroyed. It is impossible to reconstruct what happened before the incident.[5] Before trial, the plaintiff—the customer bringing forth the accusation—seeks an adverse inference jury instruction against Target for failing to preserve the video. The Court agrees and instructs the jury they can presume that the cart had been left unattended.[6]

To arrive at this conclusion, the Court established three points. First, it established that Target had a duty to preserve the video footage.[7] Second, it established that the missing video was prejudicial against

[4] Details of the case are as follows: Decker v. Target Corp, Case No. 1:16-cv-00171-JNP-BCW, Filed 10/10/2018

[5] The incident occurred on December 26, 2015, at the Target store located in Riverdale, Utah: "Caryl Jean Decker was shopping when she tripped on a flatbed stocking cart and fell onto the floor, suffering serious injury. Mrs. Decker, bleeding from the head, received medical attention at the scene of the incident. She was transported from Target by ambulance." The incident was recorded in its entirety by Target's surveillance camera. However, only a short portion of the video was preserved, just a few seconds depicting the fall. The portions of the video before and after the incident was erased.

[6] The outcome of the jury trial, however, favors Target, not the customer: "Case Number: 1:16-cv-00171-JNP. Outcome: JUDGMENT - This action came before the court for a trial by jury. The issues have been tried and the jury has rendered its verdict. IT IS ORDERED AND ADJUDGED that judgment is entered in favor of defendant Target Corporation and against plaintiffs Caryl Jean and Dennis Decker. Case Closed. Magistrate Judge Brooke C. Wells no longer assigned to case. Signed by Judge Jill N. Parrish on 10/22/2018. (jds) (Entered: 10/22/2018)" https://www.morelaw.com/verdicts/case.asp?n=1:16-cv-00171-JNP&s=UT&d=121221

[7] This is the legal doctrine followed in the case: "Spoliation sanctions are proper when '(1) a party has a duty to preserve evidence because it knew, or should have known, that litigation was imminent, and (2) the adverse party was prejudiced by the destruction of the evidence.' " Turner, 563 F.3d at 1149 (quoting Burlington Northern & Santa Fe Ry. Co. v. Grant , 505 F.3d 1013, 1032 (10th Cir. 2007)). For one thing, plaintiff made a prompt and explicit request to preserve all relevant portions of the recording one month after the incident. ("Exactly one month after the incident, on January 26, 2016, the Deckers delivered a letter to Target, through counsel, requesting that Target preserve "all pertinent records and electronic records pertaining to [the] incident or that could relate to [the] incident," as well as "a copy of any video surveillance that shows [the] accident or the area of the accident at any time before, during, or after the event." Motion for Findings of Spoliation and for Sanctions ("Motion") Exhibit 6.") On the other hand, Target's policy was to preserve recordings for no more than twenty-five days. ("The unsaved portions of the footage were later automatically overwritten by Target's system, which only maintains video surveillance footage for approximately fifteen to twenty-five days.") Target could argue—as it did—that it followed its policy. But the question, as the Court noted, was whether Target had a duty to preserve a more extended version of the recording. The Court reasoned that Target knew—or should have known—that litigation was imminent: "In this case, it is apparent that Target was on notice that litigation was imminent when Mrs. Decker tripped, fell, and left the Target store in an ambulance

the plaintiff. They could not make their case, since there was hardly any other source of information about what happened around the cart:

> Due to this deletion, the Deckers do not know who placed the flatbed stocking cart at the location of the incident, how long it was there, or why it was there. The Deckers are not prejudiced by the lack of evidence of who placed the flatbed cart because Target does not contest that it was placed on the floor by one of Target's own employees. However, the Deckers are prejudiced by the lack of footage that would have documented whether or not the cart was being "worked" or "attended" by a Target employee.

These two points, however, are not enough to warrant an adverse jury instruction against Target. The adverse instruction is justified provided there was bad faith on part of Target.[8]

Did Target act in bad faith in deleting the relevant portions of the video? The issue here is muddled, but the basic rationale the Court followed is this. Target went against its own policy and deleted relevant video recordings that its own policy would mandate to preserve. In addition, Target tried to argue that the flatbed was attended by an employee (which is an issue that cannot be litigated since the relevant recording was destroyed). More specifically, the Court wrote:

> In the footage that remains, there is no evidence of a Target employee working the flatbed cart, nor does the flatbed cart appear to move in the eleven-minute gap between the two clips. A reasonable juror could infer that the cart was unattended. However, in defending against the Deckers' claims, Target intends to offer evidence that one or more Target employees were working or attending the cart ... the Deckers ... have no way to disprove that evidence."

Both considerations—one: Target's violation of its policy; two: Target's attempt to take advantage of the missing evidence that it itself caused—suggest bad faith on the part of Target as a corporation.[9] So the Court granted the adverse inference jury instruction.[10]

Let us take stock. As we have analyzed it, the legal framework for handling missing evidence is two-tiered: first, ask about the prejudicial effects of the missing evidence; next, examine the circumstances (such as bad faith) that caused the evidence to be missing and devise an appropriate remedy (such as adverse jury instruction). There is tremendous complexity inherent in this framework, but this sketch captures some of the essential elements.

In the sections that follow, we will probe this two-tier approach based on prejudice and appropriate remedies. We will attempt to make sense of the legal framework by offering a theoretical foundation. We will also identify a few complications that the theoretical examination brings to light. The next section focuses on prejudice and the section after that focuses on remedies.

4 Reliability first

One might worry that the legal framework gives undue importance to the question of prejudice. We think the question of prejudice need not be the key question in cases of missing evidence. The question of reliability and accuracy should take precedence. We will also see—perhaps surprisingly—that this focus on accuracy and reliability agrees with legal practice.

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on December 26, 2015. Target argues it was not on notice until the Deckers' demand letter arrived on January 26, 2016; however, that argument is disingenuous. Mrs. Decker fell and an ambulance was called. This was a "guest incident" of the sort that Target's internal policies note create the "potential for a general liability claim to be brought against Target." So, even though Target's general policy is to delete videos after twenty-five days, this policy is overwritten in special circumstances, for example, when litigation is imminent. In deleting the relevant portions of the video, Target's violated its own policy pertaining to imminent litigation. All in all, then, Target should have preserved the video it deleted.

[8] "To be entitled to an adverse inference instruction, the Deckers must establish that Target acted in bad faith in failing to preserve the evidence at issue."

[9] There was no bad faith on the part of the individual who deleted the video. The employees who deleted the video claim they were not aware of Target's policy pertaining to imminent litigation. More specifically, this is the reasoning of the Court more in detail: "First, Target failed to instruct its employees regarding Target policy of what footage to preserve. Second, Target employees failed to preserve all relevant footage. And third, Target's counsel now seeks to take advantage of the evidence that Target failed to preserve by arguing that the flatbed cart was attended or worked by Target employees during the gap in the video. It is this attempt to take advantage of a situation that Target caused that leads the court to conclude Target acted in bad faith."

[10] Specifically: "The court will therefore instruct the jury to make the adverse inference that the flatbed cart was unattended for the twenty minutes prior to the accident."

4.1 Prejudice or Reliability?

Even if the missing evidence is prejudicial—it can reasonably make a difference to the decision and turn the verdict around—its addition could lower the accuracy of the decision-making process.[11] This claim can be illustrated with an example. Suppose there is good, reliable evidence linking the defendant to the crime scene in a murder case: a genetic and a fingerprint match. There is no evidence, however, about the defendant's whereabouts before or after the crime nor about who else visited the crime scene. Compare this case with one in which the same evidence is presented and—in addition—a neighbor testifies that another person visited the victim's house before the defendant did. This additional evidence, though relevant, has a low probative value compared to the other evidence. The neighbor is an elderly man whose memory has proven unreliable in other circumstances. Even though the additional evidence would make the overall body of evidence more complete—it contains information about who else might have visited the crime scene at the relevant time—its reliability in tracking the facts of guilt or innocence is lower than the genetic match and fingerprint evidence.[12]

In general, imagine a case in which (a) the missing evidence has a lower level of reliability about the facts than the already available evidence and (b) the missing evidence, if added, would have decided the case—it would have been the one piece of evidence that made a difference. When both (a) and (b) are met, additional evidence could actually lower accuracy. So, the question of prejudice should be supplemented—or replaced—by another question: do we have reasons to believe that the expanded body of evidence would be more reliable than the body of available evidence with gaps? Call this the *reliability question*.

If the answer to this question is negative, the fact that evidence is missing should be given little or no weight. Even if its absence has a prejudicial effect against one of the parties—say the defendant—we have no reason to believe that its addition would have brought about a more reliable decision-making process. More precisely, the following principle can be deployed:

> **Reliability First:** If the missing evidence, once added to the existing body of evidence, would have lowered the accuracy of the decision—say because the missing evidence is, in an objective sense, misleading or with lower reliability—it should be disregarded. So, in cases of missing evidence, the question of reliability is primary. In procedural terms, absent any clear reason for thinking the missing evidence would enhance accuracy, the missing evidence should be disregarded; otherwise, it should be taken into account.

Contrast this with another principle:

> **Prejudice First:** A defendant may benefit from evidence even if it is misleading so long as the evidence, assessed on its face, appears to favor the defendant and tips the overall balance of evidence in their favor. This applies to all defendants. So, in cases of missing evidence, the question of prejudice is primary. In procedural terms, absent any clear reason for thinking the missing evidence would turn the verdict around (prejudice), the missing evidence should be disregarded; otherwise, it should be taken into account.

The strongest argument in favor of Prejudice First is that evidence is routinely presented at trial which could be misleading or could lower the accuracy of the decision process. These possibilities do not constitute a reason against its presentation at trial. But this argument is mistaken. When evidence is actually presented in trial proceedings, it is subject to adversarial scrutiny. This process is intended to detect sources of unreliability in the evidence. Whether the evidence presented at trial is misleading or unreliable is not left to mere speculation. So how can prejudice be assessed in such highly speculative manner—without subjecting the missing evidence to adversarial testing?

4.2 Evidence from Non-Evidence

The point about the adversarial testing of the evidence shows that Prejudice First is objectionable even in light of legal practice itself. Making trial decisions guided by evidence whose content is unknown raises the danger of deciding on non-evidence. This runs counter to evidence-based trial decision-making:

> A primary function of jury instructions, as well as the rules of procedure and evidence, is to confine the jury's attention to firsthand testimony from those with personal knowledge of

[11] This claim is a challenge to the principle of total evidence; see, for example, Good (1967).

[12] This example was liberally inspired by Lee Johnson v. Jeff Premo (2021 Oregon App. Ct.), Marion County Circuit Court08C11553 - A159635, available on-line https://law.justia.com/cases/oregon/court-of-appeals/2021/a159635.html

> relevant facts, which may be probed on cross-examination, thereby excluding conjecture. The missing witness inference represents a radical departure from this paradigm, for it essentially creates evidence from non-evidence. The risk is always present that the jury will give undue weight to the presumed content of testimony not presented, and insufficient weight to that which was presented. Thomas v. United States, 447 A.2d 52, 58 (D.C. 1982).

Even if we knew precisely the content of the missing evidence, this content could not be tested in the traditional manner, say via cross-examination. This adversarial procedure is helpful to understand how strong a testimony is and thus assign weight appropriately together with the other evidence in the case. The danger of relying on missing evidence is to exaggerate its probative value. Call this *problem of creating evidence from non-evidence*.

How can this problem be addressed? On option is to simply block any appeal to missing evidence since missing evidence cannot be tested via cross-examination. A less extreme option is to require that the missing evidence—despite not being testable via adversarial scrutiny—be shown to be reliable and likely to improve the accuracy of the decision-making process. This is the rationale behind Reliability First. If the probative value of the missing evidence can only be inferred via a tenuous conjecture—so the evidence could have strong as well as rather weak probative value—and if its addition could in principle lower the accuracy of the decision-making process, this is a good reason to block any further discussion about the missing evidence. Only if the missing evidence would have clearly enhanced accuracy—and in order to do that, the missing evidence should ensure that expanded body of evidence would have a stronger probative value than the existing (gappy) evidence—can a discussion begin about possible remedies. If this is right, the question of prejudice cannot stand alone and must also be weighed against considerations about the accuracy-enhancing role of the missing evidence.

The case law in the United States we have looked at is never quite explicit on this point. But litigation about missing evidence is often confined to cases that satisfy rather stringent conditions: first, it is clearly known that evidence is missing; second, how the missing evidence could contribute to finding the facts is also known; and third, adding the missing evidence would make the decision-making process clearly more accurate. When these conditions are not met—as in the illegal firearm case—courts are quite skeptical about considering missing evidence. When these conditions are met—as in the Target case—courts are willing to consider what remedies should be granted to the party negatively affected by the missing evidence. So, even though the case law never explicitly discusses the reliability question, it might very well implicitly guide the stringent conditions that courts—and litigants themselves—apply to questions of missing evidence.

4.3 Conjectural gaps

As already noted, a feature of litigation about missing evidence is that the missing evidence must be known to be missing, in a rather precise and detailed manner. The litigants agree on a well-specified story or series of facts which unequivocally establish that pieces of information have gone missing: a witness present was not interrogated; a video recording was not preserved; a document was destroyed; etc. So the events relating to the missing evidence are well-documented and uncontested. In addition, it is clear that the missing evidence would have enhanced the accuracy of the fact-finding process. Recall the Target case. The missing video recording is the only evidence that could bear on what happened before and after the trip and fall incident. It could provide information with a high level of reliability. The case law, then, usually considers cases when we know evidence is missing and there is a clear story about the evidence missing. Since the missing evidence fits a clear story, there is good reason to assume that, if that evidence were added, the decision would be overall of a better quality—say, the false positive and false negative rates would diminish.

But evidence may be missing in circumstances that are less clear-cut. What if evidence is missing in a more generic, conjectural sense? A couple of examples can be helpful to fix ideas. First, a series of events that are agreed upon by the litigants may reasonably suggest that a certain type of evidence should be presented in litigation, but in fact it was not presented. In a murder case involving material traces, one would reasonably expect to hear genetic match evidence in the case; in a case about driving while intoxicated, one would reasonably expect the prosecution to present evidence of a breathalyzer reading besides the testimony of the officer; and so on. These reasonable expectations are of course historically dependent since one could not have reasonably expected to see, say, genetic evidence in a criminal case in the 1950's. Second, evidence can go missing in an even less specific manner. Say

there is genetic evidence about the defendant: the traces at the crime scene match the defendant. Yet this match evidence is unaccompanied by error rates of the lab that performed the analysis. Lab error rates help to assess the credibility of match evidence, but their absence cannot be ascribed to a specific series of events nor does it fall short to what one would reasonably expect to see as evidence. Another example would be: evidence is missing about the reliability of an eyewitness. In a sense, the type of missing evidence here is higher-order evidence: it is evidence about the reliability of first-order evidence

What to say about these conjectural cases of missing evidence? The peculiarity of these examples is that the fact-finders are in no position to hypothesize about the reliability of the missing evidence. The missing genetic evidence or breathalyzer evidence might be very good, highly reliable evidence. Or it might not. The problem of creating evidence from non-evidence is particularly pressing in these cases. Perhaps, on average, one would expect these types of evidence to be highly reliable, but there can still be exceptions in individual cases.

It is perhaps best to examine first why these pieces of information are missing. If there is no clearly specified causal chain that explains why the evidence is missing, no party can be held accountable for the missing evidence. It would just be a fortuitous accident. If there is an explanation why the evidence in question is missing, inferences about the missing evidence and its probative value might be warranted. What these inferences should be is a difficult question. This brings us to our next topic: how the circumstances that explain why evidence is missing should inform the formulation of remedies.

5 Epistemology or policy?

Remedies about missing evidence—whatever their exact articulation—cannot be formulated without answering the question of why the evidence had gone missing. It would be odd—or perhaps even immoral—to penalize a party that would otherwise benefit from the fact that some evidence is missing even though the party had no responsibility in bringing about the fact of missing evidence. In this context, it is useful to distinguish three cases: bad faith intent; negligence; mere accidents. Each case recommends a different response to missing evidence.

5.1 Bad faith

The question of bad faith intent is often crucial in formulating the appropriate remedy. A remedy for missing evidence could go along these lines: if available evidence cannot settle a factual dispute between litigants and a litigant destructed relevant evidence with bad faith intent of benefiting from the destruction, a factual inference should be drawn against the litigant; if the lack of evidence tips the scale in favor of a litigant who however did not maliciously act to destroy the evidence, the fact questions must be resolved in accordance to the balance of the available evidence. What would justify this rule?

The rule just proposed could be justified on the basis of a policy objective: it would create the right forward-looking incentives for litigants not to destroy evidence with the intent of benefiting from the destruction. But such remedy to gaps in the evidence may have an epistemic goal, internal to the logic of evidence evaluation. Why should the litigant who destroyed the evidence with bad faith intent be penalized? The following inference is plausible: the missing evidence that was destroyed would be in favor or against the litigant. It is unlikely that a litigant would destroy evidence in their favor, and thus the evidence must have been unfavorable to them. If the evidence was unfavorable to them and had the evidence not been destroyed, the balance of the evidence would have tipped against the defendant. Hence, an inference must be drawn against the litigant who destroyed the evidence. This analysis does not justify the remedy to gaps based on any specific policy objective. In fact, this analysis simply aims to assess the evidence conscientiously and draws inferences about missing evidence—its treats missing evidence as another fact that can be used as information to draw inference about the disputed facts.

One approach sees the remedy in terms of conscientiousness assessment of the evidence: that some evidence is missing becomes itself information (evidence) that helps to draw inferences together with other evidence (see, on this point, the discussion in Section 2). This an epistemic approach, internal to the logic of evidence evaluation. The other approach views gaps in the evidence as a a result of objectionable out-of-court behavior that must be sanctioned. Call this the policy approach. The two approaches are not exclusive, but one question is whether the epistemic approach can cover all cases or the policy approach is needed. We will now see that it cannot. So remedies anout missing evidence cannot be solely an epistemological question.

5.2 Negligence

The epistemic approach is limited to cases of evidence missing because of bad faith intent. For suppose that, without any bad faith intent, the evidence is missing because of someone's negligence or failure to comply with certain standards. In these circumstances, the inference that the missing evidence must speak against the party that would benefit from the missing evidence cannot be drawn. Here is an even more straightforward case: a video recording is missing because of an accidental blackout or a glib in the system (more on such cases soon). So, in these circumstances, the epistemic approach would recommend no remedy. Is this the right outcome? Since there is no obviously culpable behavior responsible for the missing evidence, maybe the answer is just: do nothing.

The policy approach, on the other hand, could still recommend a remedy—say, that the party that would otherwise benefit from the missing evidence should be penalized even if the evidence is missing because of non-culpable behavior. The remedy could be to rule in favor of the customer to create an incentive for shop-owners to preserve videos recording for longer periods of time.

The difference between the epistemic and the policy approach is brought to light by considering a case recently discussed by Christian Dahlman. A man voluntarily confesses to having stabbed an elderly woman while attempting to stole money from her apartment. The man gives a detailed story about the incident. The man is incriminated and tried for murder. The material evidence mostly fits the defendant's confession. But there are some loose ends: the angle of stabbing is odd for a short men such as the defendant, and in addition, the defendant has no criminal record and no clear reason to rob the elderly woman. The defense argues that the defendant's confession is unreliable: it is an attempt to cover for others. The defendant has two sons, both taller than him, both with a criminal record. Unfortunately, since the defendant confessed, the police did not think it was necessary to analyze the tin box that contained the money for fingerprints or genetic material. The box was later wiped clean. Forensic analyses of the tin box could have verified or falsified the defendant's confession. Absent that, the available evidence rests almost entirely on the confession.

The balance of the available evidence tips against the defendant, but there are reasons to doubt the reliability of the confession. The fact that forensic analyses about the tin box are missing cannot be used to make an inference that they must have been exculpatory. So the epistemic approach would recommend no remedy here. But even though there was no bad faith intent here, there was negligence—or at least lack of rigor—on the part of the police. The policy approach, then, could recommend that the case be resolved in favor of the defendant. This remedy would give incentives to police officers to conduct more careful investigations going forward.

So the policy approach offers more latitude in justifying remedies than the epistemic approach. But a questions emerges now. What are these policy-driven remedies intended to achieve? In the case of epistemic-driven remedies, the goal is clear—evaluate the evidence carefully—but when policy-driven remedies are introduced, what is their goal? To answer this question, it is useful to look at a third paradigmatic case of missing evidence: merely accidental cases.

5.3 Mere accidents v. systemic patterns

Imagine a case in which (a) the missing evidence does not warrant any inference against the party that would otherwise benefit from the missing evidence and (b) a remedy against the party that would otherwise benefit from the missing evidence does not create any evidence-related incentive. The second condition holds because the evidence is missing for purely accidental reasons that are beyond control of either party. There is no causal chain—whether through bad faith intent or negligence—in which one of the parties is implicated in bringing about the fact of missing evidence. Since there is no such causal chain, no remedy that would adversely affect one of the parties would have any effect on their future behavior about the collection, preservation or presentation of evidence. Any such remedy may have an effect on behavior, but not one that would be relevant for the availability of evidence at trial.

So the central question in designing remedies seems to be this: What is the cause that brought about gaps in the evidence? Is it a fortuitous fact or the result of a systemic pattern that advantages one or the other party in the trial? If a pure accident is the reason why the evidence is missing, no remedy would seem appropriate, simply because, whatever the remedy, it would not affect the future availability of the evidence in a predictable manner.

When gaps in evidence are due to fortuitous circumstances, there are also fewer reasons to worry about the decision system's accuracy and fairness. To see this, it is instructive to draw a comparison

with data collection. The problem of gaps in the evidence is pervasive and not confined to legal systems of adjudication. For example, researchers in the social sciences may need to make inferences from data sets that contain gaps:

> consider a large survey of families conducted in 1967 with many socioeconomic variables recorded, and a follow-up survey of the same families in 1970. Not only is it likely that there will be a few missing values scattered throughout the data set, but also it is likely that there will be a large block of missing values in the 1970 data because many families studied in 1967 could not be located in 1970. (Inference and Missing Data Author(s): Donald B. Rubin Source: Biometrika, Vol. 63, No. 3 (Dec., 1976), pp. 581-592)

In such cases, it is paramount to understand the mechanism that explains why some data points can go missing. If randomness is the cause, that some data are missing should raise a minor problem. In the quotation above, the researcher was attempting to paint an accurate picture of large scale historical trends in socioeconomic variables for families in the 60's and 70's. That individual data points are missing at random should not affect the understanding of these large scale historical trends. If, instead, the mechanism exhibits a systemic pattern, that pattern must be taken into account and the inferences drawn from the data should be corrected. What this correction should be is a difficult question to answer.

The problem of gaps in the evidence in legal systems of adjudication shares some of the problem of gaps in data, but is also distinctive. It is distinctive in that the causes for why evidence goes missing in legal trials are not the same as the causes why data can go missing. But there is an important parallelism. Data points can be missing because of random error in observational data. Similarly, legal evidence can be missing because of fortuitous circumstances that do not follow any systemic pattern.

But what happens when gaps in the evidence do follow systemic patterns? The problem of gaps seems more acute when one side or the other has better access to complete evidence—say for economic reasons—and then takes advantage of what we might term *informational asymmetry*. In this sense, symmetric (random) gaps in the evidence are less worrisome—if at all—than asymmetric (systemic) ones. When gaps in the evidence follow a systemic pattern, they do have an additional detrimental effect on accuracy as well as fairness. For suppose wealthy defendants have better access to additional evidence and use that evidence whenever it would benefit their case. This will cause a unilateral reduction of findings of liability against wealthy defendants: the ability of wealthy defendants to find evidence in their favor—and possibly destroy evidence against them if necessary—would benefit them regardless of the facts of the case. The legal system of adjudication will thus be less likely to distinguish between truly guilty wealthy defendants and truly innocent wealthy defendants. This outcome will be detrimental for accuracy, but also for fairness: decisions about wealthy defendants will be less accurate and the system will perform differently across poor and wealthy defendants.

So, a tentative conclusion here is that gaps in the evidence are particularly worrisome when they are informationally asymmetric, and less so when they occur for fortuitous circumstances even when they might have a negative effect on accuracy. Once again, it is the policy approach that is better equipped to counter systemic pattern on evidence availability and gaps in the evidence that disadvantages certain groups and advantages other groups.

6 Two guiding questions

It is time to draw some morals. Two critical questions can guide how to respond to gaps in the evidence:

> *Reliability* - Compare the body of available evidence (with gaps) and the would-be body of evidence (without gaps). Do we have reasons to believe that the complete body would be more reliable than the body of available evidence?
>
> *Causes* - What is the cause that brought about gaps in the evidence? Is it a fortuitous fact or the result of a systemic pattern that advantages one or the other party in the trial?

These questions outline a theoretical framework for designing remedies. Consider the first question. If the answer is no, the missing evidence should raise no concern. It has no discernible impact on accuracy. Answering this first question might be quite difficult, though. For how do we assess what the would-be complete evidence is like if the missing evidence is not present? But we have seen that this question can be realistically answered in some cases. In the Target case, for example, the missing recording is clearly highly reliable. In fact, whether the reliability question can be realistically answered can itself be a good guiding criterion for responding to missing evidence.

If the answer to the first questions is positive, the missing evidence, if added, would have a positive impact on accuracy. Then, consider the second critical question. If the missing evidence is the result of a systemic pattern, this would make the evidence particularly problematic. Insofar as this pattern can be corrected and eliminated—by means of appropriate incentives—suitable remedies for missing evidence should be formulated. These remedies should aim to compensate the party that is negatively affected by the missing evidence. But if the missing evidence is the result of a fortuitous fact—good or bad lack, depending on which side we look—there cannot much the legal system can do. The reduced level of accuracy that results from the missing evidence might be an inevitable cost that any system of adjudication must bear.

These remarks draw a line between gaps in the evidence the system of adjudication should care about, and gaps the system should not care about. These remarks agree, to a large extent, with legal practice, though the law does not use the same conceptual machinery. In the legal framework, the first key question is whether the missing evidence is prejudicial. It is not explicitly concerned with the question of reliability, that is, whether adding the missing would bring about a more reliable decision-making system. But the legal and theoretical framework need not be in conflict with one another. The case law focuses on clearly prejudicial forms of missing evidence—evidence that should have a substantive impact on the balance of the evidence, not just a slight, unclear, conjectural impact. The case law also emphasizes the problem of creating evidence from non-evidence: if the missing evidence is to have an impact on trial decision-making, its (conjectured) probative value must be clear enough to outweigh the need for adversarial testing of the evidence.

The bar that the law imposes for missing evidence to enter into legal decision-making is high. This is a good thing. The balance of reason in favor of considering missing evidence—even when its probative value one way or another is conjectural—might be different in criminal than in civil cases. If criminal cases protect defendant against mistaken convictions more strongly than civil trials protect defendants against mistake findings of liability, then potentially exculpatory evidence that is missing should perhaps have more impact in decision in criminal rather than civil cases. On the other hand, given that there are already several asymmetries between civil and criminal cases, it is unclear whether the asymmetries should also extent to questions of missing evidence. But a fuller discussion is left for another time.[13]

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[13] Another avenue in criminal cases to raise questions of missing evidence is for a defendant to claim that their counsel was ineffective, for example, by failing to introduce exculpatory evidence that was not otherwise available. To make a difference, this argument requires that "the deficient performance prejudiced the defense." Strickland v. Washington, 466 US 668, 687 (1984).