

ESSAY

The Augustine-Braude Bigelow Survival Debate: A Postmortem and Prospects for Future Directions

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HIGHLIGHTS

Independent analysis of a published debate on the survival question shows that future research must address certain conceptual and methodological issues to meet robust standards of evidence and reasoning.

ABSTRACT

In 2021, the Bigelow Institute for Consciousness Studies (hereafter, BICS) sponsored an essay competition designed to solicit the best evidence for the hypothesis that human consciousness survives bodily death, and more specifically, evidence that would prove this hypothesis beyond a reasonable doubt. The summer 2022 issue of *the Journal of Scientific Exploration* featured a special subsection on the BICS contest and its winning essays. Robert Bigelow and Colm Kelleher outlined the motivation, design, and judging criteria for the competition. Keith Augustine provided an extensive critical commentary on the contest design and eight of its prominent winning essays. Stephen Braude and several coauthors¹ responded to Augustine's criticisms, and Augustine provided a reply to Braude and his collaborators. Finally, the subsection concluded with a collaborative paper in which Etienne LeBel, Adam Rock, and Keith Augustine proposed a more rigorous experimental design for testing the survival hypothesis.²

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KEYWORDS

Bayesianism, Bigelow competition, evidence for survival, inference to best explanation, the survival hypothesis, theories of evidence.

In this invited paper, my primary goal is to offer a critical evaluation of the Augustine–Braude et al. exchange concerning the BICS competition (hereafter, the Contest). Augustine presented important criticisms of the Contest and several of its prominent winning essays. Moreover, many of his criticisms apply to survival literature in general and so are instructive for the wider survival debate. And Stephen Braude, one of the most important contributors to the survival debate since C.D. Broad and C.J.

Ducasse, was at the helm of the reply to Augustine. So, I was looking forward to a fine-tuned, surgical response to Augustine, which would give the devil his due whilst also offering a more conscientious and nuanced case for survival. Regrettably, this was not the case. Although the response to Augustine raised important concerns about skeptical assessments of the evidence for survival, it was hamstrung with several defects:

- **Inadequate calibration:** the Braude et al. reply is inadequately calibrated to address Augustine's actual arguments.
- **Marginalized common ground:** Braude et al. pay insufficient attention to important points on which Braude (at least sans et al.) and Augustine actually agree.
- **Opaqueness:** Braude et al. are unclear about the specific (or even approximate) favorable evidential claim and argument about survival they wish to support or defend against Augustine and his critique of the Contest's papers.
- **Epistemological neglect:** Braude et al. do not discuss the kind of epistemic principles or criteria of evidential support they wish to enlist on behalf of the survival hypothesis or in defense of the essays in Augustine's crosshairs.

I will explore each of these in detail.

However, my paper is more than an audit of the exchange between Augustine and Braude et al. I extend their discussion in a few ways. For example, Braude et al. accused Augustine of dodging a number of important issues. These issues were not essential to Augustine's arguments, but I will address them since they are relevant to the wider survival debate, and I intend this paper to make a positive contribution to the larger debate. Also, I will reiterate and further develop several of Augustine's poignant criticisms of the competition and its essays. This is important because the errors in reasoning that characterize the BICS essays are commonplace in the wider body of survival literature. I have elsewhere documented and discussed these defects (Sudduth, 2009, 2013a, 2013b, 2016, 2021a, 2021b, 2022a, 2022b), but they are worth restating here in the context of Augustine's critique. Logical fallacies in survival literature tend to spread like dandelions on lawns or adverbs in poorly written fiction. They need to be kept in check. Finally, in the interest of offering insights that might advance the survival debate, I use the negative tier of the paper to frame a variety of constructive suggestions for how survivalists ought to approach the logic and epistemology of survival arguments.

I will have a lot to say about principles and criteria of evidential support throughout the paper, but one idea will be especially important – the *comparative expectedness of data* under contrasting hypotheses. Roughly stated, an observational datum is evidence for hypothesis H_1 instead of an alternative hypothesis H_2 when the observation is more expected given H_1 than it is given H_2 . This principle is baked into inferences to best explanation, as well as various theories of hypothesis confirmation. It is

relied on across the natural and social sciences, including forensic science and legal reasoning. Survivalists, too, have relied on it, even if only tacitly – for example, in their attempts to argue that the survival hypothesis is the best explanation of the data. Augustine's critique makes significant use of the idea in the form of the Surprise Principle, and Braude et al. also appear to accept it. The principle is unavoidable if we wish to have a serious discussion about evidence. And, as I have argued elsewhere (Sudduth, 2016), the comparative expectedness of data under contrasting hypotheses plays a crucial role in diagnosing deeply entrenched problems that vitiate traditional empirical survival arguments.

Disclaimer: this paper will not be an easy read. It is lengthy, extensive in scope, and involves considerable analytical detail. Of course, the source material and its history are equally dense. A systematic analysis is warranted but requires conceptual detail and what some readers are likely to see as a daunting, technical discussion of issues in logic and epistemology. However, the wider body of literature has consistently ignored the more complex conceptual issues that underlie survivalist efforts to leverage facts in support of the survival hypothesis. Survivalists have often been guilty of a kind of naïve empiricism which eschews addressing the fundamental philosophical issues on which the cogency of survival arguments depends. Furthermore, a technical treatment of issues in logic and epistemology is unavoidable if we wish to properly diagnose the exchange between Augustine and Braude et al. Since my essay presupposes the content of the BICS essays which Augustine discussed, it would be best if the reader were familiar with some of those essays. My assigned task was to comment on the exchange between Augustine and Braude et al., not remake the meals the BICS essayists served up.

Index to Paper Sections

Due to the density of the paper, a brief outline of the content by section will be helpful.

In the first half of the paper (§1–§9), I provide a critical analysis of prominent issues in the Contest and in the exchange between Augustine and Braude et al. After exploring areas of agreement and disagreement between Augustine and his respondents, I evaluate and reply to the main objections leveled against Augustine's critique.

- **§1** and **§2** identify important conceptual flaws in the Contest and introduce several of my general criticisms of the Braude et al. reply to Augustine.
- **§3** outlines different epistemological questions lurking in the Contest and compares how Braude and Au-

gustine answer these questions.

- **§4** critically discusses inference to best explanation (IBE) survival arguments as the potential locus of genuine disagreement between Augustine and Braude et al.
- **§5** focuses on likelihoodist and Bayesian concepts of evidence in confirmation theory and roadmaps different criteria of evidential support and the role they ought to have in the logic and epistemology of survival arguments.
- **§6** analyzes Braude's reasoning about survival (outside the reply to Augustine), and I argue that Braude's arguments are best construed as a conceptual merger between traditional IBE arguments and a likelihoodist approach to evidential support.
- **§7** clarifies different forms of skepticism, all of which are operative in Augustine's critique, and how these different forms of skepticism impact the dialectical structure of debates between survivalists and their critics.
- **§8** and **§9** examine Braude et al.'s main objections to Augustine's critique, and I provide detailed critical responses to Braude and his collaborators.

The second half of the paper takes a deeper dive into epistemology and philosophy of science. More specifically, I will focus on issues in confirmation theory,³ which concerns the logic by which scientific or empirical hypotheses are confirmed or disconfirmed by empirical data. This includes evaluating the degree to which evidence supports or confirms a particular hypothesis, as well as the degree to which evidence counts against or disconfirms a hypothesis.

- **§10** responds to Braude et al.'s appeal to the well-worn survivalist trope that non-paranormal counterexplanations of the mediumistic data – for example, fraud – are improbable.
- **§11** examines confirmation-theory-related issues baked into Augustine's comments on mediumship but which Braude et al. did not adequately navigate.
- **§12** clarifies and defends Augustine's argument concerning the significance of failed tests for survival.
- **§13**, **§14**, and **§15** analyze several confirmation-theory-related flaws that undermine survival arguments but which survivalists have failed to address.

Although my commentary has a substantial negative tier, I use my critical remarks as a springboard for constructive analysis and suggestions. My overriding interest is to remedy long-standing and deeply entrenched defects in the logic and epistemology of survival arguments.

I hope this will raise the level of discourse in the survival debate in ways that mirror advancements in other (scientific and non-scientific) areas of inquiry.

Among other things, I will argue that survivalists ought to:

- give significant attention to the logical architecture of survival arguments and skeptical counterarguments, paying particular attention to using recognized argument forms to present arguments, with the premises and conclusion(s) of the main argument clearly laid out, and main arguments clearly distinguished from sub-arguments,
- apply statistician Richard Royall's important distinction between two evidence-related questions – *What does the evidence presently say? What should we believe?*
- formulate the survivalist conclusion(s) with greater conceptual clarity – for example, being clear about the difference between favorable *evidential* and *explanatory* claims, as well as the qualitative and quantitative aspects of evidential support,
- deploy fundamental non-domain-specific criteria of evidence assessment – for example, Bayesianism and likelihoodism – and calibrate them in ways that are appropriate to the survival debate, and which may be analogous to their successful use in nearby areas of inquiry such as psychology and philosophy of religion,
- adopt a probabilistic conception of evidence and use it to bulk up explanatory arguments which are in themselves insufficiently truth-conducive.

Acknowledgements

It is customary to place Acknowledgements at the end of a paper, but there is some justification for reversing that order here. I am grateful for the longstanding friendship and dialogue I have had with Stephen Braude and Keith Augustine on the topic of survival. I have known Braude for two decades. He has been a mentor to me in my work on survival and development as a philosopher. Augustine and I have also had extensive discussions on survival during the past several years. I respect their contributions to the survival debate and appreciate their helping me think more clearly about core questions in that debate. The criticisms I raise in this paper I offer in the spirit of advancing or at least illuminating the survival debate. Special thanks to Augustine for offering substantial comments on earlier drafts of this paper, as well as to Braude for commenting on the penultimate draft. Thanks to two anonymous referees for their comments on an earlier draft of the paper. Lastly, I owe a debt of gratitude to the *JSE* Editor-in-Chief James Houran for inviting me to

write this commentary, for giving me the time necessary to complete it, and for the generosity of allowing me the space to present such a lengthy commentary.

1. The Contest and the Augustine-Braude et al. Exchange: Preliminaries

The Contest

The BICS Contest was designed to solicit the best evidence for the hypothesis that human consciousness survives bodily death. The attempt to show that there are data, facts, or observations that are the “best evidence” for a hypothesis raises two kinds of evaluative issues. First, there is the *quality of the observational data* stipulated as evidence – for example, the reliability of testimony, test protocols, investigative procedures, or methodologies, and hence the reliability of data derived from such sources. Second, there is the *quality of the inferences from the data*. The BICS essayists attempted to address both evaluative issues, though oftentimes conflating the two. Some subsequent critiques of the Contest’s essays focused heavily on data-quality issues – for example, by ranking the methodologies used to obtain data in comparison with those used in the various sciences (Tressoldi et al., 2022). By contrast, the exchange between Augustine and Braude et al. brought into sharp focus conceptual issues surrounding the quality of the inferences from the data.

My focus will be on the second evaluative question. Important conceptual questions underlie the Contest’s design and its winning essays. Both raise important questions about the kind of favorable claims survivalists wish to make about the survival hypothesis, the logical structure of the arguments offered in support of those claims, and the principles or criteria of evidential support on which the cogency of survival arguments depends. These are questions in the logic and epistemology of belief in survival, and they are fundamental to the empirical survival debate. What kind of evidential claim do survivalists wish to make on behalf of the survival hypothesis? What are the relevant epistemic principles or evidential criteria that would clarify and justify the belief that there is evidence for the truth of the survival hypothesis? How strong is the evidence? And what does the argument for survival look like once we have conscientiously answered these questions, if only tentatively?

Regrettably, the Contest’s design and many of its winning essays were defective at this juncture. At times, egregiously so. Many of the essays were conceptually opaque and superficial in argumentation, frequently offering little more than narratives vitiated with an as-

sortment of garden-variety logical fallacies. Arguments were sometimes only suggested, not presented. These are hardly exemplars of lucid and rigorous thinking, much less scientific reasoning. Beyond remedial logical mistakes, a particularly salient recurring flaw was the failure to identify and critically apply evidential principles that would be appropriate, if not required, to underwrite what survivalists wish to say about the data. This is by no means a defect uniquely characteristic of the Contest and its winning essays. It is a longstanding and widespread problem in survival literature in general.

Here it is important to invoke a crucial observation made by Stephen Braude:

... there’s no such thing as a purely empirical inquiry. Even the most apparently straightforward or innocent empirical claims rest on underlying abstract presuppositions, both metaphysical and methodological.... In most areas of science, fundamental philosophical assumptions form part of the working scientist’s conceptual background. However, in survival research, abstract and deep philosophical issues often dominate the foreground. (Braude, 2003, p. 2)

Braude is a philosopher. So, it is not surprising that he should offer this particular insight. Nor was he the first to do so. Other prominent philosophers who have written on the topic of survival have made similar points – for example, C.D. Broad, H.H. Price, and C.J. Ducasse. Survival researchers today pay little regard to the cautionary and instructive wisdom of the philosophers from Cambridge, Oxford, and Brown. They remain wedded to a kind of naïve empiricism that eschews engaging the conceptual and abstract assumptions that underlie their ostensible inquiries into the physical world and the inferences they wish to draw from facts. If it is the job of empirically minded researchers to remind philosophers of the facts, it is the business of philosophers to keep such researchers honest about the interpretation of the facts.

The Contest’s Implausible Legal Evidentiary Standards

Apart from the cacophony of logical errors to which Augustine drew attention – I will revisit some of these in due course – the Contest’s design exhibits several crucial conceptual errors that are ubiquitous in contemporary survival literature. One of the more consequential missteps is the Contest’s implausible, if not incoherent, appropriation of legal evidentiary standards, specifically the criminal standard of “proof beyond a reasonable

doubt." Many of the prize-winning essays claimed to have established the truth of the survival hypothesis beyond a reasonable doubt, and many of them deployed various auxiliary legal concepts and analogies as part of their conceptual scaffolding. This might pass for "hip" survival research – it certainly makes for good marketing – but it is bad science, bad jurisprudence, and especially bad philosophy. Happily, Augustine (2022a, pp. 367–368) and Braude et al. (2022, p. 399, 401) agree that this aspect of the Contest was at least contentious, if not altogether dubious.

But more needs to be said.

Legal evidentiary standards presuppose evidence that has been shaped by legal rules. Some of these rules are not governed by the epistemic point of view, roughly, the goal of reliably getting at the truth. For example, *Federal Rules of Evidence*, Rule 403, calls for the exclusion of evidence that has probative (= epistemic) value if the probative value is "substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence" (*Federal Rules of Evidence*, 2015, p. 6; cf. Haack 2014, pp. 39–52, 78–103; Strong, 1992, pp. 340–341). These non-epistemic considerations have no parallel in survival research, but they constrain the application of legal evidentiary standards in both civil and criminal law. Moreover, many other rules further constrain what counts as evidence for fact finders. For example, testimony, to which survivalists often appeal, is subject to many constraints in legal proceedings – for example, admissibility rules, the hearsay rule, and the requirement of cross-examination. There is no parallel in survival research to these or other rules that govern procedures aimed at judicial outcomes. Hence, survivalist appeals to standards that presuppose such rules are implausible, if not incoherent.

Bigelow and Kelleher (2022) offered a justification for the Contest's reliance on the beyond-reasonable-doubt standard, but they failed to acknowledge the longstanding debate in jurisprudence concerning what the standard actually measures – for example, the fact-finder's degree of belief, mathematical probability, or degree of warrant (Haack, 2014, pp. 16–23, 50–77). It is counterproductive to rely on an unclear standard to make a clear case for survival, especially when the obscurity surrounding the standard in its legal context is resolved by protocols – for example, jury instructions – for which there is no analog in survival research. Bigelow claimed to have selected the beyond-reasonable-doubt standard for the Contest since people are familiar with that phrase, and he wanted essay submissions to at least aspire to "the highest standards of evidence possible" (Bigelow & Kelleher, 2022, p.

354). People might be familiar with the phrase, but what matters is what the phrase *means*. The general public is not better qualified to answer this question than legal scholars. Since there is no consensus among the latter, the standard is not transparently the highest epistemic standard available.

What is true and important here is that there is an epistemic *dimension* to legal evidentiary standards and rules. The probative aspect of legal relevance in the *Federal Rules of Evidence*, Rule 401, implies this:

"Relevant evidence" means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence. (*Federal Rules of Evidence*, 2015, p. 6; Strong, 1992, p. 339)

In legal scholarship and practice, relevance and the assessment of the (individual and cumulative) weight of evidence are commonly explicated using more fundamental concepts of reasoning and criteria of evidential support – for example, classical statistics, Bayesianism, likelihoodism, and inference to best explanation (Aitken et al., 2022; Bex & Walton, 2012; Dahlman et al., 2021; Dawid, 2002; Fenton et al., 2016; Haack, 2014; Kaye, 1988; Pardo & Allen, 2007; Strnad, 2007; Tillers & Green, 1988). This reliance on generalizable principles of reasoning is necessary. As Haack once aptly noted, "the law is up to its neck in epistemology" (Haack, 2014, p. 4). And just as "mistaken epistemology can only obscure, and not illuminate, legal issues" (Ibid., p. 29), so also epistemological confusions can only obscure and not illuminate matters related to the inquiry into the truth of the survival hypothesis. In jurisprudence, there has been an enormous amount of literature and healthy debate concerning epistemology. No parallel exists in connection with survival research in general or the Contest in particular. In the latter case, this is ironic. The designers of the Contest and many of its prize-winning essayists pretended to deploy a legal evidentiary standard, but they failed to understand that they were *ipso facto* neck deep in epistemology. This requires giving at least as much attention to well-established general theories of evidence as we routinely see in jurisprudence and other areas of scientific and non-scientific inquiry (see endnote no. 59). But there was precious little of this in the Contest or its winning essays. Some essayists even derided such efforts as overly academic, abstract, and subjective (Nahm, 2021, pp. 59–60; cf. Kelly, 2016, p. 593).

The survival debate is, to repeat Haack's phrase, "up to its neck in epistemology." The Contest had the poten-

tial to advance the survival debate at this juncture. This might have even proven to be the only sensible parallel to jurisprudence and scientific reasoning. But the Contest and its essays failed. More broadly, the failure of contemporary survivalists and their nearest sympathizers to redress their conceptual errors remains one of the more disappointing characteristics of the contemporary survival debate, as well as one of the more formidable obstacles to advancing that debate. Against this background, the debate between Keith Augustine and Stephen Braude and his coauthors was an important opportunity for paving a new path.

The Augustine-Braude et al. Exchange

In the introduction to the subsection of the summer 2022 issue of the *JSE*, Editor-in-Chief James Houran explained that he commissioned Keith Augustine to provide a critical analysis of prize-winning essays in the Contest, specifically to “evaluate their quality of reasoning and consistency of evidence” (Houran, 2022, p. 349). He did not ask him to comment on the broader survival debate or to provide arguments against the survival hypothesis. Braude and his coauthors were supposed to “provide counterarguments to Augustine in their Commentary” (Ibid., p. 349). Although Braude et al. conceded that Augustine offered some fair criticisms of the Contest, for the most part, they were unimpressed with Augustine’s critique. They dismissed it as a conceptually unsophisticated and empirically uninformed recycling of old skeptical arguments. In his reply, Augustine accused Braude et al. of losing sight of the central question he was addressing, which was “whether the critiqued essays met their directive to provide ‘hard evidence beyond a reasonable doubt’ of the survival of human consciousness” (Augustine, 2022b, p. 412). So, Braude et al. “failed to confront the critique with counterpoints (or concessions) responsive to its general criticisms” (Ibid., p. 413).

We might suppose that this outcome is unsurprising. Augustine has been a sharp critic of empirical survival arguments for many years, whereas Braude has long been sympathetic to the case for survival – for example, Braude has emphasized the difficulty of explaining away the best demonstrations of mental mediumship, whether through conventional or exotic counterexplanations. However, Braude has also offered poignant criticisms of survival arguments (Braude, 2003, pp. 1–30; Braude, 2021a), including those he presented in his own prize-winning BICS essay (Braude, 2021b). So, the exchange between Augustine and Braude et al. had the potential to advance the survival debate in some interesting ways. Regrettably, it did not.

Augustine provided a very thorough and lucid critique of several of the prominent prize-winning BICS essays. He showed why they failed to meet their objective, and he did this with transparency concerning his own epistemological assumptions – for example, his appeal to the Surprise Principle as a widely accepted standard of evidential support. In their reply to Augustine, Braude and his cohorts provide familiar survivalist rejoinders to prosaic skeptical assessments of the ostensible evidence for survival. While these rejoinders have some merit in the broader survival debate, their relevance to Augustine’s critique is questionable at best.

There are four general problems in the Braude et al. reply.

First, there is a **calibration** problem. While Braude et al. correctly identified problematic assumptions and inferences that have historically characterized certain forms of skepticism about survival and the paranormal, their response was not adequately calibrated to address Augustine’s *specific arguments*. Augustine’s primary objective, which he repeatedly stated, was to show why the arguments for survival in the BICS essays he examined did not succeed in proving what they claimed to prove. Braude et al. repeatedly lost sight of this specific goal and the arguments Augustine was presenting. In places, they recontextualized the discussion as a debate about the evidence for the paranormal, whereas Augustine’s critique was focused specifically on alleged evidence for survival. And when Braude et al. focused on survival, they framed their points in a way that was not adequately sensitive to Augustine’s arguments or the survival arguments he was evaluating.¹ As a result, they saddled Augustine with extraneous assumptions, as well as made inappropriate demands that he should provide evidence for claims that he either did not make or which would, at best, be tangential to his main arguments. Augustine correctly identified the calibration problem in his reply to Braude et al. (Augustine, 2022b, pp. 412–415, 429).

Second, there is the problem of **marginalized common ground**. There is agreement between Augustine and Braude (sans et al.) concerning the implausibly extravagant claims and remedial errors made in the BICS essays. Also, Augustine and Braude are both skeptical about the alleged “scientific” character of the case for survival, at least in the sense intended by the Contest’s design and many of its prize-winning essays. The reply to Augustine, which Braude largely authored, does not acknowledge this common ground, though it was a significant part of Augustine’s critique. For example, Augustine took issue with the contention in some of the BICS essays that they were presenting good, if not compelling, *scientific evidence* for survival (Augustine, 2022a, pp. 366–367, 371, 374). He

also took issue with the essayists' contention that they had proved survival beyond a reasonable doubt (Ibid., pp. 367–368, 376), and Braude et al. at least expressed a shared concern about a reliance on this legal standard (Braude et al., p. 399, 401). It is not clear why Braude et al. did not say more about the extent and nature of their agreement with Augustine. Transparency about areas of agreement can help properly dial in areas of substantive disagreement.

Third, there is an **opaqueness** problem with respect to the evidential claim about survival that Braude and his coauthors were trying to support or defend against Augustine. They indicated that there is evidence *in some sense* for survival – that is, there are facts that actually support the survival hypothesis and so provide some reason for thinking that the hypothesis is true. But they are not clear about the nature of this support or how strong they think it is. This opaqueness derives from a lack of clarity about their understanding of evidence – for example, whether it should be understood probabilistically. Braude (sans et al.) has elsewhere argued that, in at least the best cases, the survival hypothesis offers a better explanation of the data than do the usual suspects to which skeptics often appeal. But I find their position on evidence, explanation, and the relationship between them murky. And if this is opaque, it will be hard to identify any points of serious disagreement with Augustine.

Finally, there is the problem of **epistemological neglect**. Braude et al. frequently introduced metaphysical considerations to reinforce points they intended to make against Augustine.² However, the crucial issues in Augustine's arguments are epistemological – for example, the principles of evidence on which we must rely to make assessments of the weight of the total evidence. Augustine appealed to the Surprise Principle to determine which of two competing hypotheses the evidence strongly favors. No similar account of evidential principles is found in Braude et al. Like many survivalists, they suggest some kind of connection between explanatory power and evidential support, but the connection remains unclear. Also, silence at this juncture puts Braude et al. at a disadvantage in offering any kind of salient response to Augustine's arguments. His arguments involve a probabilistic understanding of evidence and purport to show, among other things, that “the overall evidence doesn't even make personal survival more probable than not” (Augustine, 2022a, p. 366, 390; cf. Augustine, 2022b, p. 412).³

2. Problematic Aspects of the Reply to Augustine

We need to take a closer look at the Braude et al. reply to Augustine.

Identifying Augustine's Basic Argument

An initial problem is that **Braude et al. did not provide even a terse summary of what they take Augustine's main argument(s) to be.** For example, what conclusions did Augustine claim to be supporting? What were the premises of his arguments? What kind of support did Augustine claim his premises offer for his conclusion(s)? Regrettably, survivalists have frequently ignored these important contextual, expository matters, as I have previously pointed out in connection with Jim Matlock (Sudduth, 2021a) and Jim Tucker (Sudduth, 2022b). Nonetheless, I was surprised to see this oversight in the Braude et al. reply to Augustine. They immediately launched into a variety of criticisms. This was a premature excoriation. They offered no tie-in between their criticisms and specific aspects of Augustine's argument. The criticisms were offered in a dialectical vacuum. But without the structure of Augustine's arguments in view, we do not know what part of Augustine's arguments the criticisms are intended to target, whether Augustine is really guilty of making the assumptions Braude et al. saddle him with, or how consequential any of their criticisms would be to Augustine's main arguments. So, even if Braude et al. have undetermined Augustine's arguments, it is not clear how.

In the opening of their reply, Braude et al. explain the design of their reply:

Augustine offers many criticisms of the winning BICS entries he selected for discussion, and we cannot assess them all. In fact, we prefer to shelve discussion of the messy particulars in Augustine's selection of essays, thereby sparing the reader from being drenched in minutiae. Besides, there are bigger concerns that take priority. We need to examine major and pervasive deficiencies in Augustine's discussion—for example, his reliance on straw-man or other notoriously unacceptable tactics, his refusal even to *mention* positive evidence, and his failure to realize that there is nothing privileged about the many assumptions he brings to the table. (Braude et al., 2022, pp. 399–400)

Responding to *all* of Augustine's criticisms would be an unreasonable demand, but it is reasonable to expect a critical engagement with Augustine's *main arguments*. But then we need some exposition of those arguments, however abbreviated. Without this expository framework, Braude et al. can only assert, not show, that Augustine's arguments require the “many assumptions” they reference. While we can appreciate the intention to focus on

“bigger concerns,” given the task Houran commissioned Braude et al. with, a clear account of Augustine’s main arguments ought to have taken priority, especially given how frequently survivalists overlook this fundamental feature of critical analysis. Had Braude et al. provided such, they might have more carefully distinguished between claims Augustine made that were essential to his arguments and those that were tangential. Unfortunately, Braude et al. too frequently focused on Augustine’s side remarks. The red herrings prevented a serious engagement with his actual arguments. In fact, they altogether obscure Augustine’s arguments.

Augustine presents his main argument in a lengthy section of the paper under the heading *What Does the Total Available Relevant Evidence Tell Us?* (Augustine, 2022a, pp. 371–375). The title alone should make it clear that Augustine’s concern is about how the total evidence is weighed, but is there a succinct way of stating his argument? Yes:

[A1] If belief in the survival hypothesis is well-supported,⁴ then it is proportioned to all of the available relevant evidence. (Augustine, 2022a, p. 371)

[A2] Belief in the survival hypothesis is not proportioned to all of the available relevant evidence. (Ibid., pp. 371–384, especially pp. 374–375)

Therefore:

[A3] Belief in the survival hypothesis is not well-supported. (Ibid., pp. 365, 390).

I will refer to this as **Augustine’s basic argument**. He offers ramified versions of the argument as he adapts it to the “messy particulars” of the BICS essays and their extravagant conclusions. For example, many of the BICS essayists assert that the evidence supports the survival hypothesis *beyond a reasonable doubt*. If subject to normative constraints, this standard entails a *very* well-supported hypothesis (see endnote no. 8 for discussion on the epistemic core to the legal standard). The bulk of Augustine’s critique is focused on presenting detailed support for premise [A2] in the light of the very specific claims made in the BICS essays. As I will show, one of Augustine’s prominent concerns is that the BICS essayists either ignore or mishandle ostensible counterevidence in a way that undermines the conclusions they wish to draw. Therefore, the BICS essayists have failed to justify the survival hypothesis or the strong evidential claims they make on behalf of it.

Braude et al. do not sketch Augustine’s basic argument, nor do they otherwise address his well-advertised concern about how survivalists weigh (or fail to weigh)

the total evidence. They criticize Augustine for *his* failing to address certain strands of positive evidence which allegedly provide the strongest support for the survival hypothesis – for example, the amount and consistency of intimate information about the deceased conveyed in some of Mrs. Piper’s sittings, and the protocols implemented to detect or obviate fraud. “[Augustine] is mute on the significance of the many times Mrs. Piper got intimate hits with anonymous sitters she was meeting for the first time—including proxy sitters and people who, during the medium’s visit to England, happened to be travelling through Cambridge” (Braude et al., 2022, pp. 400–401).

The Braude et al. reply illustrates rather than dislodges the very problem Augustine’s arguments are intended to diagnose. Survivalists disproportionately focus on the apparent evidence in *support* of their position and criticize skeptics for failing to do so, especially by propping up outlier cases that seem very difficult to explain away. Augustine’s challenge to the survivalist is clear: whatever facts the survivalist wishes to adduce as alleged evidence for the survival hypothesis, the net plausibility of the survival hypothesis requires considering potentially contravening or undermining facts, so-called *negative evidence*. Since survivalists are the ones making the affirmative claim, they must explain how *they* weigh the total (confirming and disconfirming) evidence. The issue is not whether some fact or other is by itself strong positive evidence for survival, but whether the total evidence strongly supports the survival hypothesis. It is the cumulative weight of the facts that matters. Hence, one cannot successfully argue a robust case for survival without a conscientious handling of ostensibly negative evidence.

The issue of how disconfirming or defeating evidence impacts assessments of the total evidence is especially relevant to the Contest’s essays. Many of them attribute to the survival hypothesis an extremely high net plausibility, but disconfirming evidence might undermine such a strong inference while leaving more modest inferences intact. Braude et al. do not acknowledge this nuanced but crucial point. Although I will later comment on the “positive evidence” to which Braude et al. allude, the idea that Augustine *needed* to mention or address the “positive evidence” either misconstrues his argument or imposes an unnecessary requirement for its cogency. First, his argument assumes the evidence for survival presented in the BICS papers, and this includes Braude’s own BICS essay, which includes the positive evidence in question. Second, the strength of the best evidence for survival depends in part on the comparative force of the negative evidence. Misunderstanding Augustine’s argument at this juncture results in illicitly shifting the burden of proof. As a result, Braude et al. do not critically engage Augustine’s basic ar-

gument or any of the sub-arguments he presents in support of premise [A2].

One of the more serious consequences of the Braude et al. failure to consider Augustine's basic argument is that the reader receives no survival-friendly account of the kinds of criteria that bear on net plausibility assessments. This, of course, was one of Augustine's criticisms of the BICS essays. After all, it would be important to know whether the survival debate is stove-piped at this juncture because (i) survivalists and skeptics have different criteria of evidence assessment which underwrite their respective net evaluations or (ii) they differently apply the same evidential criteria. Moreover, there are important questions we can ask about Augustine's basic argument. How should we best understand the idea of proportioning a belief to all the relevant available evidence? What are the appropriate criteria for weighing different strands of evidence? How should a cumulative case survival argument be formulated? I would like to have seen Braude et al. address these issues. They did not do so. To this extent, the reply to Augustine exemplified the same epistemic blind spot to which Augustine drew attention in his critique of the BICS essays.

Missed Opportunities and Conceptual Opacity

While Braude et al. suggested that the BICS essays may not represent the best that contemporary survival research has to offer, **it is unfortunate that they did not more firmly acknowledge and clearly identify what they regard as the significant flaws in the essays.** They give Augustine a begrudging nod in the opening of their paper for identifying "some areas of concern" (Braude et al., 2022, p. 399), but most of what they tersely mention is low-hanging fruit and concern the design of the Contest rather than the content of its prize-winning essays. To be fair, they did offer a few tepid cautions to survivalists (Ibid., p. 403, 407), including the concession that the Contest "did not discover or create an authoritative consensus about what the 'best' evidence is, much less clarify the principles by which ostensible survival evidence should be evaluated" (Ibid., p. 399). This is an understatement. The crucial epistemological issues were not even on the radar of most of the winning essays. Worse, dubious substitutes created the illusory appearance to the contrary – for example, reliance on purported legal evidentiary standards, assigning schoolish letter-grades or scorecards to index unconstrained subjective impressions about the quality of data, unwarranted inferences based on contentious models of statistical significance, and opaque, underdeveloped, and question-begging deployments of inference to the best explanation. I would like to

have seen a more honest, survival-friendly concession to the failures of the Contest's essays, something similar to what Braude has offered in previous publications, including his own prize-winning BICS essay (Braude, 2021b, pp. 4–11, 29–32).

Braude et al. also did not redress the defects in the BICS essays that they themselves tepidly acknowledge. But a salient response to Augustine required this, either by shoring up the *specific* survival arguments Augustine was critiquing or by offering new arguments that would be immune to his criticisms – that is, if they were interested in showing that there is a case for survival better than the ones presented in the BICS essays. For example, Augustine's critique often targeted the survivalist's contention to be offering good *scientific* evidence for survival. Braude and his cohorts conceded that parapsychological phenomena are not susceptible to ordinary empirical testing (Braude et al., 2022, p. 405), and Braude has elsewhere argued that neither psi nor survival are open to the kind of falsification that characterizes scientific hypotheses (Braude, 2003, pp. 16–19, 300). So, Braude appears not to agree with the more extravagant claims made in many of the BICS essays. What then is the survival argument Braude et al. envision that is an improvement on the arguments presented in the BICS essays under examination but also immune to Augustine's criticisms, including the criticisms Braude et al. regarded as "reasonable" (Braude et al., 2022, p. 399)? They do not say, they do not show, and consequently, the reader does not know. This is especially odd since Braude's own prize-winning BICS essay provided resources for outlining such a case. I shall explore this in due course.

Braude et al. exacerbate the above problem by failing to clarify the favorable evidential claim they wish to endorse on behalf of the survival hypothesis and then contrast it with the evidential claims Augustine doubts or denies. Braude et al. suggest that the BICS essays do not represent the best that survival research has to offer, but they seem to think *there is some sort of a case for survival that is better than what Augustine is willing to concede.* Of course, there being such a case is consistent with the Contest's essayists failing to make that case. This is true even if, contrary to the contentions made in many of the prize-winning essays, survival is not a scientific hypothesis, or the evidence is not as strong as the BICS essayists claim. So, what evidential claim about survival is weaker than what the overly ambitious BICS essayists assert but stronger than what Augustine is willing to concede? This Goldilocks evidential threshold is not transparent in reading Braude et al., but I will later try to identify it by looking at Braude's own work on survival. Nonetheless, it is a shortcoming of the reply to Augustine

that Braude et al. did not clarify the evidential claim they wish to defend nor state the evidential principle(s) that would justify that claim. Without this kind of clarity, we cannot say with any reasonable assurance whether the case for survival is better than Augustine thinks it is.

The previous point is especially important because Augustine clearly stated an important principle of evidential support – the Surprise Principle – on which he relied for his evaluation. He also made it clear why net evaluations require a conscientious handling of negative evidence, and why the BICS essays failed at this juncture. In his view *the evidence as presented in the BICS essays does not make the survival hypothesis more probable than not, much less highly probable, and still less proven to be true beyond a reasonable doubt*. As far as I can see, Braude et al. neither say nor imply anything to the contrary. Nor do they say anything that undermines Augustine’s probabilistic assessment. In fact, Braude et al. make no attempt to critically engage Augustine’s probabilistic reasoning. I will later provide several examples of how their criticisms miss the mark on account of this omission.

Dialing in the Braude et al. Position

The opaqueness problem and the closely allied problem of epistemological neglect hamstringing the assessment of Augustine’s BICS critique. To see why this is the case, we need to map out the wider conceptual territory in which the BICS essays and the Augustine-Braude et al. exchange are embedded. We need to consider the main claims survivalists have made. This will also help dial in the potential area of genuine disagreement between Augustine and Braude et al.

Survivalists have made at least seven different claims based on the kinds of observational data – ostensibly paranormal phenomena – that are the focus of the BICS essays:

- (1) The observational data logically demonstrate the survival hypothesis.
- (2) The observational data prove the survival hypothesis beyond a reasonable doubt.⁵
- (3) The observational data prove the survival hypothesis by a preponderance of the evidence.
- (4) The observational data show that the survival hypothesis is probably true.⁶
- (5) The observational data are evidence⁷ that the survival hypothesis is true.
- (6) The observational data favor the survival hypothesis over alternative hypotheses.⁸
- (7) The survival hypothesis is the best explanation of the observational data.

(1)-(7) are distinct though potentially related claims. Survivalists have frequently failed to distinguish them. Indeed, they often uncritically conflate them – for example, survivalists routinely conflate (5) and (7). But depending on which of the above claims one intends to justify, different principles of evidential support will be relevant, and the corresponding supporting arguments will also differ. This is also true of the arguments deployed to justify *denying* any of the above claims, as well as arguments that purport to show that survivalist arguments in support of these claims lack cogency. The matter is further complicated by the potential to combine or logically connect some of the claims above – for example, (4), (5), and (6) are often combined with or connected to (7). Sadly, survivalists often exhibit little more than a remedial grasp of these important conceptual distinctions. Consequently, their responses to skeptics are vitiated by the same lack of clarity and flawed reasoning which characterizes their attempts to argue in favor of the survival hypothesis.

It seems that Braude (at least sans et al.) does not affirm (1), (2), or (3). It looks like he shares Augustine’s skepticism about these stronger claims. But Braude et al. do accept (5). Of course, without further elucidation that claim is exceedingly modest. It is unsurprising that Augustine does not deny (5). It is less clear what Braude et al. would say about (4). They do not claim or argue that survival is more probable than not, the lower bound for (4), nor do they attempt to defend such a claim. So, I am inclined to think they are not committed to (4), unless the term “probable” just means subjective credence. But this would be an unremarkable and uninteresting claim in the context of the BICS papers and the survival debate in general. No one denies how firmly survivalists believe the survival hypothesis or how firmly they believe the data support it. What is at issue is the actual probative value of the data and how it *ought* to be assessed as evidence.

That leaves us with (6) and (7). Although Braude et al. do not explicitly affirm it in their reply, Braude (sans et al.) has elsewhere argued that, with respect to data in the better cases, the survival hypothesis offers a better explanation than do rival hypotheses (Braude, 2003, 2021b). So Braude has argued something like (7), partly on the basis of (6), at least where the data are narrowly circumscribed to facts which are allegedly most resistant to non-survival counterexplanations. I will subsequently look at Braude’s own reasoning in greater detail, but it is worth noting here that Braude et al. frequently refer to the deficiencies of alternative non-survival explanations of the data, specifically Augustine’s alleged failure to address these shortcomings. Since ruling out alternative explanations is a crucial step in inference-to-best-ex-

planation arguments, Braude et al. at least appear to be defending a nuanced version of (7), and probably (6). This potentially puts Braude in opposition to Augustine, who is clear why the survival hypothesis fails as a serious explanation of anything. Unfortunately, since Braude et al. do not calibrate their answers in a way that addresses Augustine's very specific, probabilistic arguments, the precise nature of the disagreement between them remains obscure. In the next two sections, I will explain where I think the disagreement lies.

3. What is the Question? Honing in on the Actual Disagreement

To better diagnose the above problems, we need to clearly distinguish between different kinds of questions lurking in the Contest and in the wider survival debate. This can help clarify the plausible point of genuine disagreement suggested above. But the discussion is of broader significance. One of the ubiquitous problems in survival literature is the failure to distinguish between different kinds of epistemological questions we can ask about the survival hypothesis.

Here is one such question:

- (I) Is it rational (or reasonable) to believe in survival on the basis of the kinds of phenomena discussed in the BICS essays?

Braude has provided a compelling argument in his corpus of publications that the answer to question (I) is yes, at least if we have the strongest cases in mind. For example, in his prize-winning BICS essay, Braude proposed to answer the question "whether there's sufficient evidence for, and a rational basis for belief in, the survival of bodily death," or whether there can be a "rationally defensible basis" for belief in survival, and he is confident that there is (Braude, 2021b, pp. 1-2; cf. Gauld, 1982, p. 263; Stevenson, 1969). Similarly, in his book *Immortal Remains*, Braude concluded that "the evidence provides a reasonable basis for believing in personal postmortem survival" (Braude, 2003, p. 306). But question (I) clearly is not the question in dispute in the present context. Augustine agrees that there is a sense in which belief in survival can be rational (Augustine, 2022a, p. 390).⁹ Moreover, the Contest's essayists, other than Braude, make much stronger claims, and the stronger claims are the focus of Augustine's critique.

We can also ask:

- (II). Do the kinds of phenomena presented in the BICS essays provide evidence for survival?

One might suppose that if the answer to (I) is yes, the answer to (II) should also be yes. If evidence is a constraint on rational belief, this is correct. But an affirmative answer to (II) is otherwise plausible. Some accounts of evidence are liberal enough to permit there to be evidence for empirical propositions, however improbable the propositions are. For example, according to Bayesian incremental confirmation, O is observational evidence for a hypothesis H just if O raises the probability of H. But an increase in probability need not make a hypothesis probable – that is, at least more probable than not; the hypothesis could still be improbable. In §5 I will explore Bayesian confirmation and other accounts of evidence in greater detail. But the thing to note here is that (II) is not the question in dispute. To their credit, neither the Contest nor the majority of the Contest's essays are interested in the low-hanging fruit of *mere evidence* for survival.

A third question:

- (III) What ostensible evidence is the best evidence for survival?

(III) was built into the design of the Contest: "The question that contest authors attempted to answer in no more than 25,000 words was: What is the Best Evidence for Survival of Human Consciousness After Permanent Bodily Death?" (Bigelow & Kelleher, 2021, p. 351). Braude's BICS essay was a response to this question. He identified a subset of data from mediumship – for example, the mediumship of Mrs. Piper – as the best evidence for survival. Of Mrs. Piper's mediumship, Braude said: "I consider it the strongest case we have for survival, and I'd say no other body of evidence comes close" (Braude, 2021b, p. 29). He concluded that the evidence here provides a "rational basis for belief in the survival of bodily death" (Ibid., p. 3). But perhaps not a very firm belief. He ends his essay by saying, "even if the best actual evidence doesn't warrant a reassuring confidence in the reality of survival, at the very least it encourages optimism on the matter" (Ibid., p. 52). This is much weaker than survivalist claims in the other BICS essays.

To be clear, Braude's arguments in his BICS essay exhibit a level of conceptual sophistication absent from much of the literature, including the majority of the other winning BICS essays. But his conclusions about the evidence are modest in comparison to claims made by more strident survivalists. The best evidence, like the best explanation, is often the best of a bad lot. And given just how weak the rest of the evidence is, even by Braude's own lights, it seems premature to pop a celebratory evidential cork. Even a non-survivalist can accept that there

is some evidence for survival, that some of the evidence is much better than all the rest, and that the best evidence provides a reasonable basis for belief in survival. Owing to the modesty of Braude's claim, it is not surprising that even Augustine can accept it (Augustine, 2022a, p. 390).

By contrast, **Augustine's critique is focused on stronger claims made on behalf of the survival hypothesis and the evidence adduced in support of it** – for example, that the evidence makes the survival hypothesis more probable than not, highly probable, that the evidence is good scientific evidence, or that it meets the legal standard of proof beyond a reasonable doubt. Although these claims differ in important ways, they each entail that the evidence for survival confers a *strong* positive epistemic status on belief in survival. These stronger claims litter the field of pro-survival literature, as well as the BICS essays. These claims and the arguments for them are the main target of Augustine's critique.

So, we can also ask the following two related questions:

(IV). Does any of the ostensible evidence for survival presented in the BICS essays confer a strong positive epistemic status on belief in the survival hypothesis?

and

(V). Do the BICS essays successfully *show* that the evidence they present confers a strong positive epistemic status on belief in the survival hypothesis?

The answer to (V) can be no, while the answer to (IV) is yes. Augustine's main argument supports a negative answer to question (V). But in places he uses this argument as a springboard to talk about the survival evidence as a whole, independent of the BICS essays and their authors. After all, if the Contest represents the best that survivalists have on the evidential tap, or something approximating it, there is some justification for supposing that a negative answer to (V) provides at least modest grounds for a negative answer to (IV). This can also be independently argued, as I will later show.

I do not see that Braude et al. offer any reasons for an affirmative answer to (IV) or (V), so they are not obviously denying Augustine's conclusion. And as I will subsequently show, the issues they do raise are not properly calibrated to address Augustine's reasons for supposing that the answer to (IV) or (V) is no, so they are also not undercutting Augustine's argument. For these reasons, it is difficult to see how they are offering anything to counter Augustine's arguments.

That said, Braude makes an atypically stronger state-

ment at the outset of his prize-winning BICS essay. After denying that we have a *proof* of survival, Braude writes:

But empirical claims never enjoy that degree of certitude, and yet we can still have good reasons for believing many things that nevertheless remain vulnerable to possible revision or subsequent rejection. So what participants in the survival debate need to consider is something more modest than a slam-dunk proof—namely, whether there's sufficient evidence for, and a rational basis for belief in, the survival of bodily death. (Braude, 2021b, p. 1)

Braude concludes the same essay by saying:

So, we've seen that one can have legitimate and defensible reasons for concluding that some form of postmortem existence can occur... So even if the best actual evidence doesn't warrant a reassuring confidence in the reality of survival, at the very least it encourages optimism on the matter. Confidence will have to come later, if it comes at all. (Ibid., p. 52)

Whatever Braude means by "legitimate and defensible reasons", the phrase injects considerable modesty into what Braude says here. Most skeptics would agree that one *can* have defensible reasons for concluding that some form of postmortem existence *can* occur. Similarly, someone *can* have defensible reasons for concluding that God *could* exist, that the universe *could* be a simulation, or that Oumuamua *could* be debris from an alien spacecraft. Skeptics can also agree that the best evidence does not warrant a reassuring confidence in the reality of survival. But these concessions are considerably more modest than the sufficiency-of-evidence target Braude affirms at the beginning of his essay. It is unclear whether Braude's concluding comments are intended to be an intellectual settlement which falls short of that target, or if he thinks that his explanatory considerations are sufficient evidence for survival. If the latter, then we have a point of substantial disagreement with Augustine.

In reflecting on Braude's comments above, I think it would be helpful to invoke an important distinction statistician Richard Royall has made. With respect to evidence and hypothesis testing, he distinguished between three questions:

1. What do I believe, now that I have this observation?
2. What should I do, now that I have this observation?

3. What does this observation tell me about A versus B? (How should I interpret this observation as evidence regarding A versus B?) (Royall, 1997, p. 4).

Questions 1 and 3 are the relevant ones for my purposes. It is easy to conflate the *belief question* and the *evidence question*, perhaps because the former presupposes the latter if we desire our belief states to be informed by what the evidence says. However, when it comes to assessing criteria of evidential support, we should be prepared to acknowledge criteria that are very useful for answering question 3 but which are not intended to answer question 1. Braude is correct that participants in the survival debate need to consider something more modest than a slam-dunk proof. However, they also need to consider something more modest than whether there is evidence sufficient to warrant *belief* in survival or whether the evidence makes it reasonable *to believe* in survival. These questions are important, but it may be useful for participants in the survival debate to temporarily sideline questions about belief and focus instead on what the evidence says. After all, the evidence may have something important to say, even if it does not tell us enough to answer the belief question. I will further develop this in §5 and §6.

4. Inference to Best Explanation

As previously indicated, Braude has argued that the survival hypothesis can be shown to have an explanatory advantage over alternative explanations if we provide a proper analysis of important features of the better cases. For example, the amount and consistency of veridical claims that emerged in many of Mrs. Piper's mediumistic sittings, as well as her extended and accurate trance personae. Augustine demurs. So, the most plausible point of disagreement between Augustine and Braude et al. seems to lie in their respective assessments of the explanatory power of the survival hypothesis and the evidential cash value of its alleged explanatory merits.

To unpack this, we need to ask a different question than the previous ones:

- (VI). Does the survival hypothesis provide the best explanation of data drawn from the ostensibly paranormal phenomena discussed in the BICS essays?

Reasons for an affirmative answer to question (VI) constitute an explanatory or inference-to-best-explanation (IBE) survival argument. Not only is this kind of argument prominent in the BICS essays, it is ubiquitous in the wider body of survival literature, both historically and

among contemporary writers. IBE survival arguments are typically deployed to underwrite the claim that data from mediumship, cases of the reincarnation type, etc., provide evidence for the truth of the survival hypothesis.¹⁰ This is because many, if not most, survivalists who have construed the case for survival as an IBE argument have been *explanationists*. They have believed that a hypothesis' providing the best explanation of some data constitutes *evidence* that the hypothesis is true, or that this otherwise provides an epistemic justification for belief in the hypothesis (Almeder, 1992, pp. 61–62; Griffin, 1997, pp. 263–268; Lund, 2009, pp. 215–218; Paterson, 1995, pp. 189–190). So, an affirmative answer to (VI) is often the basis for an affirmative answer to questions (II)–(V) in §3. And it appears that at least some survivalists also think that an affirmative answer to (VI) provides an answer to Royall's first question – what should we believe?

A brief digression on IBE survival arguments is warranted before looking more closely at Braude's view. I have offered a variety of criticisms of these arguments over the years (Sudduth, 2009, 2013a, 2013b, 2016), and the criticisms are worth restating here. Also, several of the flaws in the BICS essays are linked to their mishandling of IBE arguments and implausible attempts to leap from the presumed explanatory power of the survival hypothesis to strong evidential claims. Finally, an analysis of the issues associated with IBE survival arguments might better illuminate where Augustine and Braude et al. are in genuine disagreement.

The generic form of the IBE survival argument can be represented as follows:

- (1) O_1, O_2, \dots, O_n are observations in need of explanation.
- (2) The survival hypothesis S explains O_1, O_2, \dots, O_n .
- (3) No available competing hypothesis R explains O_1, O_2, \dots, O_n as well as S does.

Therefore:

- (4) The survival hypothesis S is the best available explanation of O_1, O_2, \dots, O_n .

So (probably):

- (5) The survival hypothesis S is true.

$\{O_1, O_2, \dots, O_n\}$ are placeholders for the relevant observational data, whether culled from mediumship, cases of the reincarnation type, out-of-body and near-death experiences, haunting and poltergeist phenomena, or some other ostensibly paranormal phenomena. Premise (2) affirms the explanatory power of the survival hypothesis over such data, and premise (3) denies that any of the available rival hypotheses does at least as well as the

survival hypothesis in explaining the data. Although (4) is the intermediate explanatory conclusion, most survivalists who endorse the IBE survival argument infer (5) from (4) as the final conclusion of the argument. So, it is natural that survivalists should also regard IBE arguments as providing grounds for believing in survival.

I have elsewhere discussed several intractable problems that infect IBE survival arguments (Sudduth, 2013a, 2013b, 2016). Since I will return to this in connection with Augustine's criticisms of the BICS essays, let me lay my skeptical cards on the table. To date, no IBE survival argument has succeeded, and the prospects for future success or advancing the survival debate look pretty bleak. Simply stated, traditional IBE survival arguments are self-defeating (Sudduth, 2016, chapter 11, especially pp. 286–289). The reasons survivalists routinely offer to justify premise (3) undermine the justification for premise (2). Fixing this problem undercuts the traditional survivalist justification for premise (3). But if the reasons for accepting (3) undermine the justification for accepting (2), and conversely, then we are not presently justified in accepting both (2) and (3). Therefore, we are not justified in accepting (4) on the basis of (2) and (3).¹¹ That is my central argument against IBE survival arguments succinctly stated in five sentences.

My other reservations about IBE survival arguments stem from very general considerations about the difficulty of inferring the (probable) truth of a hypothesis from its explanatory merit (Lipton, 2004, pp. 151–163). This blocks the inference from (4) to (5). The best explanation may be the best of a bad lot of explanations (van Fraassen, 1989, p. 143). To circumvent this difficulty, we must suppose that the true explanation is among the candidate explanations, but that is what the inference to the best explanation was designed to do in the first place. Also, we must assume that explanatory considerations convert to evidential cash value and probabilify the target hypothesis. Even so, the best explanation might still be an improbable one. The best explanation would be more probable than the alternatives, but if each of the alternatives has a very low probability, the best explanation is only more probable than improbable alternatives, which is consistent with the best explanation itself being improbable. Moreover, even if our set of hypotheses $\{H_1, H_2, H_3\}$ is exhaustive and so includes the true explanation, we cannot conclude that the best explanation H_3 is true because, though H_3 may be more probable than H_1 and more probable than H_2 , it is not more probable than the disjunction *either* H_2 *or* H_3 (McCain & Poston, 2024).

There are different ways of troubleshooting the above problems. The point here is that survivalists who deploy IBE survival arguments do not even acknowledge

these problems. Consequently, they are ill-positioned to formulate IBE survival arguments that have some degree of immunity to these criticisms. For example, one can mitigate the general philosophical difficulties above by adding premises to the generic IBE argument or by merging IBE and Bayesian probability (see §5). As I have argued elsewhere (Sudduth, 2009, 2013a, 2013b, 2016), I doubt that survivalists can successfully leverage these maneuvers to defend IBE survival arguments. But if survivalists do not understand and acknowledge the problems, they are unlikely to advance the debate with new ideas and improved arguments. In fact, they may altogether fail to grasp criticisms of survival arguments that presuppose this conceptual territory. This hamstringing their ability to offer informed responses to skeptical objections. Unfortunately, like people who ignore safety recall notices for their cars, survivalists continue to press the accelerator on arguments that have been recalled.

Where are Braude et al. in This Landscape?

Braude (sans et al.) has argued that the survival hypothesis has explanatory advantages over non-survival alternatives, at least when it comes to the best cases. In Braude's view, this is because the abundance and consistency of verified information in such cases, specifically mediumship and cases of the reincarnation type, is more difficult to reconcile with non-survival explanations (Braude, 2003, pp. 216–222; 2021b). The alleged explanatory power of the survival hypothesis underwrites Braude's claim that there is a reasonable basis for belief in survival (Braude, 2003, p. 306).

Some selections from Braude (2003) highlight the connection he has drawn between evidence, explanatory mileage, and a reasonable basis for belief in survival:

Of course, it's philosophically momentous to conclude that there's satisfactory evidence for some sort of postmortem survival.... My aim, here, is to examine carefully the best types of evidence for survival and to see how successfully they resist explanation in terms of unusual (and possibly paranormal) capacities of the living. (Braude, 2003, p. xiv)

My case selection was guided by my primary objective in this book: to determine whether there's any reason for preferring a survivalist explanation of the evidence over explanations positing exotic (including paranormal) activities among the living... We need to examine good cases *very* carefully to decide whether the sur-

vival hypothesis succeeds where its rivals fail. (Ibid., p. xv)

And I think we can say, with little assurance but with some justification, that the evidence provides a reasonable basis for believing in personal postmortem survival. It doesn't clearly support the belief that everyone survives death; it more clearly supports the belief that some do. And it doesn't support the belief that we survive eternally; at best it justifies the belief that some individuals survive for a limited time. (Ibid., p. 306)

As these passages show, Braude thinks the survival hypothesis is *explanatorily successful*, even if marginally so, at least when it comes to the best cases. In his view, the better cases have features, previously noted, that are difficult to explain away either by conventional or exotic counterexplanations. Moreover, the explanatory merits of the survival hypothesis over rival hypotheses imply that the data it explains should be regarded as *evidence* that provides a basis for a *reasonable* or *justified* belief in survival.

Where S = the survival hypothesis and O = the salient observational evidence, we have the following inferential schema:

S is *explanatorily successful* over O. \rightarrow O is *evidence* for S. \rightarrow It is *reasonable* to believe S.

Braude should be regarded as an explanationist. However, to his credit, he does not endorse the following implausible inference:

(4) The survival hypothesis S is the best available explanation of O_1, O_2, \dots, O_n .

So (probably):

(5) The survival hypothesis S is true.

Instead, he seems to endorse an inference from (4) to

(5') The explanatory success of the survival hypothesis is *evidence* for the truth of the survival hypothesis.

Then a subsequent inference from (5') to

(5'') The explanatory success of the survival hypothesis is a *reasonable* basis for belief in postmortem survival.

While (5') and (5'') are more modest than (5), they still raise several issues that need addressing. I am particularly interested in (5') since it is an evidential claim inferred

from an explanatory claim. This inference is unclear and potentially contentious. It needs further unpacking. We need to review some general points related to the concept of evidence and outline some well-established and widely deployed criteria of evidential support. This will illuminate why Braude's inference from (4) to (5') is implausible unless augmented with principles from confirmation theory. But it is otherwise important to map out different criteria of evidential support and how they can function in a robust epistemology of survival arguments. These issues will also play an important role in my subsequent analysis of the Augustine-Braude exchange.

5. Confirmation Approaches to Evidential Support

I previously noted Richard Royall's distinction between two important evidence-related questions: *What should you believe? What does the present evidence say?* It is time to look at this distinction more closely in relation to different ways of thinking about evidential support, as well as tie them to the questions canvassed in §3. This is something of an outline on salient concepts in epistemology relating to criteria of evidential support.

Evidential Justification

Evidence plays an important role in justifying beliefs, but not all evidence is sufficient to justify a belief. A female student enters the Philosophy Department student lounge carrying a copy of Descartes's *Meditations on First Philosophy*. This is plausibly evidence that the student is a Philosophy major, but by itself it is not strong enough to warrant believing that she is. Several witnesses report seeing a man matching Brian's description near the location of a homicide about the time of the murder, another witness describes seeing a car similar to Brian's parked near the location of the homicide around the same time, and Brian has no alibi covering the time of the murder. Here we plausibly have evidence that Brian committed the murder, but many people would have the (I think correct) intuition that the evidence is not strong enough to justify believing that he committed the murder.

What degree of evidence is strong enough to justify believing a proposition? Philosophers have given two general answers. First, the evidence should make the proposition at least *more probable than not*. Second, the evidence must make the proposition *highly probable*.¹² A justified belief exhibits a kind of goodness vis-à-vis the epistemic point of view – roughly, the goal of believing what is true and not believing what is false. Where evidence justifies a belief, the evidence must track truth in a particular way. It must put us in a strong position to believe what is true and not believe what is false. This

suggests that for evidence to be good enough to justify a belief that H the evidence must be sufficiently *indicative* of the truth of H and sufficiently *discriminative* between H and not-H. This is a robust account of evidential justification. In the above examples, the evidence is plausibly indicative of the truth of the belief. After all, if H were true, we would expect O. But it is not discriminating evidence because it seems implausible in those cases to suppose that if H were not true, then we would not expect O. But it is easy to consider how additional observations would alter this. For example, another Philosophy major might say the student is in two of his upper-division Philosophy classes, classes typically reserved for Philosophy majors, and that she has been attending Philosophy Club meetings since the beginning of the semester.

Although having evidence that makes a hypothesis more probable than not is an important epistemic desideratum, having evidence below this threshold can also be epistemically significant. For example, evidence can still raise the probability of a hypothesis, even if it does not confer a very high probability on it, and the cumulative effect of multiple instances of “raising the probability of H” may eventually raise the probability of H high enough to justify believing H. But evidential support can be construed otherwise. Instead of evidential support involving observations that raise the probability of a hypothesis, observations may discriminate between two competing hypotheses by favoring one of them over the other. My impression is that survival literature has not properly distinguished between the latter contrastive view of evidential support as a favoring relation and the prior non-contrastive view which interprets evidential support as boosting the probability of a hypothesis, ideally above some threshold value.

We can draw on confirmation theory to develop the distinctions introduced above and see how they bear on Royall’s distinction.¹³ I will subsequently show how they are woven into the fabric of the debate between Augustine and Braude et al., as well as how they bear on the wider survival debate. To reiterate what I said earlier in the paper, the theories and principles of evidence I outline below are non-domain specific and widely deployed across scientific and non-scientific disciplines. They also crop up, often opaquely, in survival literature.

When Does an Observation Favor One Hypothesis Over Another Hypothesis? The Law of Likelihood

(LL) Observation O favors hypothesis H_1 over hypothesis H_2 if and only if $\Pr(O | H_1) > \Pr(O | H_2)$.

(LL) states the law of likelihood (Edwards, 1972; Roy-

all, 1997; Sober, 2008). It parses evidential support in terms of a *favoring* relation between some observation(s) and two contrasting hypotheses. It tells us that observation O favors H_1 over H_2 just if H_1 confers a greater probability on the observation than does H_2 . In other words, H_1 leads us to expect O more than H_2 does. $\Pr(O | H)$ formally expresses **the likelihood of H**. I use the word “likelihood” here (and throughout) in the technical sense coined by R.A. Fisher to refer to the probability *of the observation* given the hypothesis. This should be distinguished from the probability *of the hypothesis* given the observation, formally $\Pr(H | O)$, also called the posterior probability of H. (LL) uses likelihood inequalities to establish when an observation favors one hypothesis over another.

Technically, (LL) is the first part of the law of likelihood. The second part tells us:

(*) The degree to which O favors H_1 over H_2 is given by the likelihood ratio $\Pr(O | H_1)/\Pr(O | H_2)$.¹⁴

Since some survivalists are likely to misunderstand (LL) or its application to the survival hypothesis, let me offer a few clarifications.

First, (LL) does not require that we assign numerical values to $\Pr(O | H_1)$ or $\Pr(O | H_2)$. It only requires that the hypotheses be sufficiently contentful to say that some observation is more probable/expected under one hypothesis than it is under another (Sober, 2019, p. 34).¹⁵ Jimmy experienced a sudden onset of intense vomiting and explosive diarrhea a few hours after eating a bacon cheeseburger he purchased from a college food vendor. We do not need to assign numerical values to see that the observation is more probable under the hypothesis that the bacon cheeseburger was contaminated with Salmonella than it is under the hypothesis that Jimmy is upset about receiving a C+ on his Physics exam earlier in the day.

Second, (LL) does not require that either of the contrasting hypotheses *predicts* the observational evidence, either in the sense of making the evidence at least more probable than not or the evidence being novel or previously unobserved. The presence of an accelerant in a house fire is more probable given the hypothesis of arson than it is given the hypothesis of an electrical malfunction, but the arson hypothesis does not predict the presence of an accelerant in either of the previous senses. After all, there are many ways for an arsonist to start a fire without an accelerant. In more extreme cases, an observation can favor one of two contrasting hypotheses, even if the observation is highly improbable under each of the hypotheses. A forensic scientist might observe that two individuals have a particular genetic profile. If the two

individuals are full siblings, the probability of the profile might be $(0.0005)^{20}$, whereas if the two are unrelated, the probability of the profile might be $(0.000001)^{20}$. In this case, the genetic data favor the siblings hypothesis over the hypothesis that the two are unrelated. Although the genetic data are hugely improbable under each hypothesis, they are 500^{20} times larger (and hence less improbable) under the siblings hypothesis (Sober, 2008, p. 52; Sober, 2012, pp. 360–361).

Third, neither (LL) nor (*) (when its value is high) tells us anything about the *probability* or *plausibility* of either of the contrasting hypotheses. (LL) only tells us that an observation discriminates between two competing hypotheses – that is, O is evidence in support of H_1 as opposed to H_2 , and O is evidence against H_2 in relation to H_1 (Royall, 1997, pp. 8–11, 14–15). And notice that the conception of evidence here is *relative*. O is evidence for or against a particular hypothesis H_1 only in relation to some other hypothesis H_2 .

Finally, (LL) does not tell us that we should *believe* H_1 or *disbelieve* H_2 . After all, even if $\Pr(O | H_1)$ is much greater than $\Pr(O | H_2)$, $\Pr(H_1 | O)$ might be very low, even lower than $\Pr(H_2 | O)$. Evelyn Marie Adams won the New Jersey State lottery twice in four months (Hand, 2014, p. 86). This observation is much more to be expected given (H_1) God wanted Adams to have money to pay her bills, invest, and pay the educational expenses for her family members than it is given (H_2), the lottery was fair, but $\Pr(H_1 | O)$ is very low, much lower than $\Pr(H_2 | O)$. Although the observation favors H_1 over H_2 , it would not be reasonable to believe H_1 nor disbelieve H_2 on the sole basis of the observation.

When Should We Up Our Confidence in a Hypothesis? Incremental Confirmation

(IC) O confirms H if and only if $\Pr(H | O) > \Pr(H)$.

(IC) codifies a Bayesian view of evidential support called *incremental confirmation* (Fitelson, 2007, 2011; Lin, 2023; Sober, 2002, 2008). $\Pr(H)$ refers to the prior probability of the hypothesis – its probability independent of the observation. (IC) tells us that an observation O confirms H just if O raises the prior probability of H. For the Bayesian, confirmation is probability-raising, and disconfirmation is probability-lowering. Hence, O disconfirms H just if $\Pr(H | O) < \Pr(H)$. Bayes' theorem (see below) allows us to extract equivalent definitions of (IC). For example, O confirms H just if $\Pr(O | H) > \Pr(O | \sim H)$ – that is, the probability of O given H is greater than the probability of O given not-H. Like (LL), incremental confirmation embeds a likelihood inequality: $\Pr(O | H)$ and $\Pr(O | \sim H)$. However,

$\sim H$ is not a particular alternative hypothesis that contradicts H but the full logical complement of H, that is, the disjunction of all logically possible alternatives to H.¹⁶ Also, as with (LL), specific numerical values are not needed. Incremental confirmation works regardless of the value one assigns to $\Pr(H)$, as long as that value is neither 0 (H is impossible) nor 1 (H is certain). Similarly, specific numerical values are not needed for the likelihood inequality $\Pr(O | H) > \Pr(O | \sim H)$.

My traffic app says it will take 20 minutes to drive to PetSmart. Suppose I have a low degree of confidence in this since I know PetSmart is only a few miles away. But after I leave my house, I hit heavy traffic on the route due to road construction. This observation raises the probability that the traffic app is correct. What I observe in route to PetSmart is much more to be expected given that the traffic app is correct than it would be if the traffic app were incorrect. My degree of confidence in the traffic app's route time, whatever it was initially, ought to increase in the light of the observational data. In this example, the observation raises the probability of the hypothesis, and it does so without needing to assign specific numerical values to either the prior probability of the hypothesis or the likelihood of H or $\sim H$.

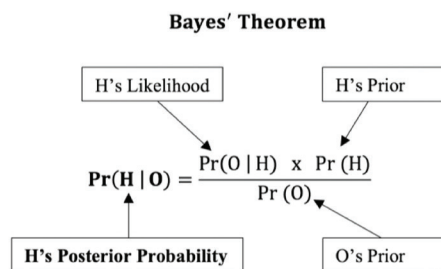
Clearly then, incremental confirmation does not mean *proving* that a hypothesis is true, and disconfirmation does not mean *proving* that a hypothesis is false. Confirmation simply tells us we should increase our confidence in H, and disconfirmation tells us that we should decrease our confidence in H. Moreover, even if O confirms H, $\Pr(H | O)$ can be low. This is perhaps not true in the traffic app case above. But suppose you hear a rolling, rumbling sound in the attic. The hypothesis that there are gremlins in the attic bowling guarantees the observation, so $\Pr(O | H) = 1$. But the negation of the gremlin hypothesis does not entail the observation, so $\Pr(O | H) > \Pr(O | \sim H)$. Here the observation incrementally confirms the gremlin hypothesis, but the probability of that hypothesis, given the observation, remains very low (Sober, 2008, pp. 10, 22, 37–38).

(LL) answers Royall's question about what the evidence says, whereas (IC) answers Royall's belief question. More specifically, (IC) tells us when we ought to increase or decrease our confidence in a particular hypothesis, or – in the event $\Pr(H | O) = \Pr(H)$ – that we ought to make no changes to our degree of confidence in H. This is because (LL) informs us that evidence discriminates between two competing hypotheses and supports one over the other, whereas (IC) tells us what we need to do with our confidence in a specific hypothesis.¹⁷

How Can We Determine the Net Plausibility of a Hypothesis? Bayes' Theorem and Posterior Probabilities

(IC) does not tell us whether the probability of H is greater than some alternative hypothesis given the same evidence, nor does it tell us what the overall probability of H is given the evidence. But, incremental confirmation is derived from Bayes' theorem, which does give us the resources for answering further questions about the net plausibility of a hypothesis, technically, the posterior probability of a hypothesis.

Bayes' Theorem



Bayes' theorem follows from the axioms of the mathematical calculus of probability. It tells us that $\Pr(H | O)$ – the probability of H given O (posterior probability of H) – depends on three values:

- $\Pr(O | H)$: the extent to which the hypothesis leads us to expect the observation (H's likelihood)
- $\Pr(H)$: the probability of H before O is considered (H's prior probability).
- $\Pr(O)$: the extent to which we would expect O whether or not H is true. (O's prior or marginal probability)

As a first approximation, *Bayes' theorem tells us that the probability of a hypothesis depends on the extent to which it leads us to expect those observations which are otherwise not expected, and where the prior probability of H is a weight*. Roughly stated, $\Pr(H | O)$ will be high to the extent that the product of the likelihood and the prior (the numerator) is large relative to the marginal probability of the observation (the denominator). Since $\Pr(O)$ is shorthand for $\Pr(O)\Pr(O | H) + \Pr(\sim H)\Pr(O | \sim H)$, a crucial element in Bayes' theorem is $\Pr(O | H)/\Pr(O | \sim H)$ – the *Bayesian likelihood ratio*. Recall that $\sim H$ here refers to the disjunction of all alternatives to H, not to a single hypothesis that contradicts H. So, the Bayesian likelihood ratio differs from the “likelihoodist” likelihood ratio which contrasts a hypothesis and a single alternative hypothesis.

The likelihood ratio in the Bayesian context compares how probable the observed datum O is under the hypothesis H relative to the probability of O under all alternative hypotheses (collectively designated by the catchall $\sim H$).

So, the posterior probability of a hypothesis requires that we determine whether O is more expected under H than it is under $\sim H$. If so, how much more? Precise numerical values are not necessary to answer either of these questions, but we must be able to say something about the comparative expectedness of the observations under H and under the catchall $\sim H$.¹⁸ If the likelihood ratio is greater than 1, it implies that the observed evidence O is more likely under hypothesis H than under the catchall $\sim H$. In which case, O confirms H. This leads to an increase in the posterior probability of H relative to $\sim H$. The higher the likelihood ratio, the stronger the evidence supports hypothesis H over $\sim H$, and the more it pushes up the posterior probability of H. Conversely, if the likelihood ratio is less than 1, the evidence is more expected or better explained by $\sim H$ than by H. This leads to a decrease in the posterior probability of H. The likelihood ratio is central to Bayesian reasoning.

From Bayes' theorem, we can derive several important criteria, in addition to (IC), for assessing the posterior probability of a hypothesis.

Which of Two Hypotheses is More Probable than the Other? Principle of Contrastive Posterior Probabilities

$$(CP) \Pr(H_1 | O) > \Pr(H_2 | O) \text{ if and only if } \Pr(H_1)\Pr(O | H_1) > \Pr(H_2)\Pr(O | H_2).$$

(CP) allows us to contrast the posterior probabilities of two competing hypotheses. It tells us that the posterior probability of one hypothesis (H_1) is greater than the posterior probability of another hypothesis (H_2) just if the product of the prior probability of H_1 and its likelihood is greater than the product of the prior probability of H_2 and its likelihood. If the priors of the hypotheses are equal, then the hypothesis with the higher likelihood will have the higher posterior probability. If the likelihoods of the hypotheses are equal, then the hypothesis with the higher prior probability will have the higher posterior probability. Notice that (CP) differs from the contrastive or differential support articulated in (LL). (LL) tells us that likelihood inequalities alone are evidentially salient for discriminating between H_1 and H_2 . (LL) tells us about the contrastive probabilities of the observational evidence given each of the hypotheses, not the probabilities of the hypotheses themselves. (LL) is about what the observa-

tion tells us about two competing hypotheses – which of the two the observation favors.

It is worth noting that IBE arguments can be merged with (CP). A Bayesian explanationist takes it that the best explanation is the one with the highest posterior probability (Lipton, 2004, pp. 103–120; McCain & Poston, 2024; Niiniluoto, 2004). Similarly, the *better* of two explanations, which need not be mutually exclusive or jointly exhaustive, will be the one with the higher posterior probability. Given (CP), an explanation H_1 will be superior to a rival explanation H_2 either with respect to H 's likelihood or H 's prior probability (or both). And, the greater the difference between $(H_1)Pr(O | H_1)$ and $Pr(H_2)Pr(O | H_2)$, the greater the difference in their posterior probabilities and hence the greater the explanatory power of one over the other. While it is possible to merge (LL) and IBE, typically, more goes into explanatory power than likelihoods – for example, simplicity, coherence, scope, and fit with background knowledge. The Bayesian typically rolls these into the prior probability of a hypothesis (Roche & Sober, 2013; Sober, 2002).

When Does Evidence Justify Believing a Hypothesis? Principle of Absolute Confirmation

However, perhaps we want to determine, not simply whether a hypothesis has a *higher* posterior probability than one or more alternative hypotheses, but whether its posterior probability is *high* or *very high*. Bayes' theorem also gives us the resources for inferences about the overall or net probability of a hypothesis.

(AC) O confirms H if and only if $Pr(H | O) > \frac{1}{2}$.

(AC) captures a stronger sense of confirmation, where the observations or evidence make the posterior probability of H high to very high. This kind of Bayesian confirmation is usually called *absolute* confirmation. The term “absolute” here does not mean the absolute value of H, nor any kind of conclusive confirmation. It refers to the kind of confirmation that occurs when O raises the probability of H above a particular threshold value. Since that threshold value is typically $\frac{1}{2}$, I have built it into the formulation. Given (AC), an observation strongly supports H. Of course, it may also be the case that $Pr(H | O) \gg \frac{1}{2}$ – that is, the probability of H given O is *much greater* than $\frac{1}{2}$. In both cases, O confers a high probability on H; it does not merely raise H's probability (IC), nor does it mean that the posterior of H is merely higher than the posterior of some particular rival hypothesis (CP). (AC) is usually what is required if the evidence needs to be strong enough to justify a belief in a truth-conducive sense of justification.

“Bayesian confirmation theory,” as Augustine has aptly stated, “is merely probabilized hypothesis-testing” (Augustine, 2022c, p. 805n17). It is not surprising then that, in the history of psychological research, prominent commentators have baked Bayesian elements into their explanatory reasoning about survival (Almeder, 1992; Broad, 1919, 1925/1960; Dodds, 1934; Ducasse, 1961; Griffin, 1997; Lund, 2009; Paterson, 1995).¹⁹ They have relied on prior probabilities and contrastive likelihoods to determine whether the survival hypothesis is explanatorily superior to non-survival alternatives. I do not mean that these writers have *formally* utilized Bayesian criteria. With only a few exceptions (Augustine & Fishman, 2015; Sudduth, 2016), the reliance on Bayesian ideas has been largely informal and often inchoate. But survivalists and their critics have long debated the antecedent or prior probability of the survival hypothesis, as well as the expectedness of the data, but for the survival hypothesis. Based on such considerations, writers have inferred which of the competing hypotheses (survival vs. some alternative) has the higher net plausibility. And the survivalists among these writers have also concluded that the cumulative weight of the evidence confers a favorable net probability on the survival hypothesis, usually greater than $\frac{1}{2}$. So (CP) and (AC) have at least been informally relied on in the survival debate since writers as early as Broad and Dodds, and typically these Bayesian elements have been merged with explanatory reasoning.

Bayesian epistemology deserves a more extensive treatment than there is space for here, though Augustine and I have elsewhere discussed it at length (Augustine & Fishman, 2015, pp. 256–271; Sudduth 2016, pp. 160–187). Here I note two things. First, even when survivalists have tacitly relied on one or more elements of Bayesian reasoning, their arguments have only informally or loosely incorporated such elements. Augustine and I each advocate a more robust use of Bayesianism. Second, and more concerning, is the extent to which survivalists push back against Bayesian analyses, and for transparently bad reasons. So, before moving on, it is necessary to address a couple of frequently encountered survivalist criticisms of Bayesian analyses. The more virulent objections concern prior probabilities.

Survivalist Confusions about Bayesian Analyses

Some survivalists have said or otherwise suggested that skeptics such as Augustine rig their Bayesian arguments by assigning a low prior probability to the survival hypothesis so that no amount of accumulated evidence can tip the scales in favor of survival. Jim Matlock (2016b, 2016c, 2019)²⁰ and Ed Kelly (2016)²¹ have each presented

variations of this objection, and Nahm (2021, pp. 59–60) seems to give it a nod of approval while citing Kelly (2016).

Matlock, the more strident advocate of this objection, wrote:

Augustine and Fishman naturally believe that the dependence thesis is the winner of the contest with the independence thesis, because they assume that the mind cannot affect the brain and body and that the physical realm is causally closed. These starting assumptions constrain the estimation of prior probabilities and guarantee that the dependence thesis comes out ahead. If we reject the notions that the brain always acts antecedent to mental events and that the physical realm is causally closed, the calculus changes so that the dependence and independence theses are more equal in their prior probabilities; and when we take into account all of the data relating to mind/body relations, not just those which conform to the expectations of the dependence thesis, our background knowledge changes enough to tilt the balance in favor of the independence thesis. (Matlock, 2016b, p. 200)

Augustine (2016, pp. 216–218) and I (Sudduth, 2021a, pp. 193–195) have each shown that this is a misrepresentation of the Bayesian analysis in Augustine and Fishman (2015). In fact, we get multiple misrepresentations for the price of one. Apart from the fact that Augustine and Fishman do not claim (or imply) that “the mind *cannot* affect the brain and body” (emphasis mine), they are quite clear that their Bayesian analysis relies on the principle of indifference with respect to prior probability. They initially assign *equal* prior probabilities to the dependence and independence theses. They write, “we will charitably assign equal prior probabilities of 0.5 to the dependence and independence theses” (Ibid., p. 260). This is the same prior probability survivalists such as Ducasse (1961) have relied on (cf. Broad, 1919; 1925/1960, pp. 519–532). Since the sum of the priors (H and ~H) must equal 1, assigning the survival hypothesis a prior of 0.5 means that we are initially assuming that survival is *as probable as not*. We are assigning it the *same* initial probability as its negation. This probability is not low, and the value assignment is not rigged.

The prior is a weight in Bayes’ theorem, but the likelihood ratio is the engine that drives the posterior probability. Assigning a prior of 0.5 highlights this. Begin with a prior of 0.5. If, once we consider the evidence, the likelihood ratio is less than 1, then the posterior probability of the survival hypothesis will drop below 0.5. Hence,

the survival hypothesis will *now* be improbable to some degree. In the article in question, Augustine and Fishman argue that relevant likelihoods are less than 1. This is why they say, “if we charitably assumed equal priors for the dependence and independence theses, Bayes’ theorem would [still] yield a vastly lower posterior probability for the independence thesis” (Augustine & Fishman, 2015, p. 270). But in this situation, the critic is not *assigning* a low posterior probability for the survival hypothesis. The low posterior probability is the outcome of a properly conducted data-driven empirical assessment. If survivalists such as Matlock and Kelly think otherwise, they must address the arguments for the unfavorable likelihood ratio and/or present a wider data set that gives the survival hypothesis a compensatory favorable likelihood. In other words, they must show that there is something wrong with either the data that Augustine and Fishman use or their inferences from that data. To date, they have done neither.

The Washing Out of Priors

The previous point draws attention to the *diachronic* aspect of Bayesianism, also ignored by survivalist critics of Bayesian analyses. Bayes’ theorem tells us how different quantities in the equation are related to each other and how the quantities in the numerator and denominator contribute to the posterior probability of a hypothesis. The theorem itself is synchronic. It informs us of the posterior probability at a particular time. But Bayesianism is also diachronic. It gives a rule for updating one’s degree of belief as new evidence comes in.

The rule for updating is a simple one:

The rule of updating by strict conditionalization says that if *O* is the totality of the new information you have acquired, your new probability for *H* should be equal to your old value for $Pr(H | O)$. In other words, $Pr_{\text{now}}(H) = Pr_{\text{then}}(H | O)$, if *O* is all the evidence you have acquired between then and now. (Sober, 2008, p. 11).

As Bayesians say, today’s priors are often yesterday’s posteriors. This is especially relevant when considering how new evidence or the accumulation of evidence *ought* to change the initial prior probability of a hypothesis. I pointed out above how updating can lower an initially neutral prior probability, but this would also be true if we initially assigned a high prior probability to the survival hypothesis. To illustrate, assume $Pr(\text{survival}) = 0.8$ (highly probable). If $Pr(O | \text{survival}) = 0.2$ and $Pr(O | \sim\text{survival}) = 0.9$, the posterior probability of survival will be

0.47, which is less than $\frac{1}{2}$. The exact numerical values do not matter here. They simply illustrate this crucial point: what matters, especially when considering the effects of the accumulation of independent pieces of observational data, is rational updating, which is dependent on the Bayesian likelihood ratio.

Notice, though, that the point about rational updating can, in principle, work in the other direction, which is favorable to the case for survival. If – at a given time – we assign the survival hypothesis a sufficiently low prior probability, this can prevent its posterior probability from being greater than $\frac{1}{2}$ at that time. But updating will raise the probability if the likelihood ratio is greater than 1. In this way updating can wash out an initially low prior probability for the survival hypothesis, pushing its posterior probability above $\frac{1}{2}$ – more probable than not (Augustine & Fishman, 2015, p. 258; Sudduth, 2016, pp. 202–205).²²

In Sudduth (2016, pp. 204–205), I illustrated the above point with a formalized version of R.W.K Paterson’s informal Bayesian-style cumulative argument for survival. I showed that one could initially assign the survival hypothesis a low prior probability – I selected 0.125 to illustrate – and by successive updating using several categories of evidence conclude that the survival hypothesis is more probable than not. But the point here is generically easy to otherwise illustrate. Assume a likelihood ratio of 2 for the evidence, so the evidence is twice as likely if the survival hypothesis is true than if it is false. Using different low priors as our starting points, we can easily calculate how many independent items of evidence it would take to push the posterior probability of survival above $\frac{1}{2}$.

- Assume $\Pr(\text{survival}) = 0.10 = \text{very improbable}$. If the likelihood ratio = 2 for each of **four** independent items of evidence, then the posterior probability of the survival hypothesis will increase to 0.64 (more probable than not) after successive updating.
- Assume $\Pr(\text{survival}) = 0.010 = \text{highly improbable}$. If the likelihood ratio = 2 for each of **seven** independent items of evidence, then the posterior probability of the survival hypothesis will increase to 0.56 (more probable than not) after successive updating. **Eight** pieces of evidence pushes the posterior probability to 0.72.
- Assume $\Pr(\text{survival}) = 0.001 = \text{extremely improbable}$. If the likelihood ratio = 2 for each of **eleven** independent items of evidence, then the posterior probability of the survival hypothesis will increase to 0.65 after successive updating.²³

Theoretically, then, two people could initially disagree about the prior probability of survival, but they could come to an agreement over time as the result of

updating. The initial disparity of priors is washed out with the accumulation of evidence over time. It also follows that if one’s priors are subjectively skewed, updating over time can correct this. This shows that *the likelihood ratio matters more than any initial prior probability*. So, if survivalists wish to attack the unfavorable outcome of Augustine’s Bayesian analyses, they need to show that his treatment of the likelihood ratio is flawed. To date, they have not done this. Ironically, survivalists who reject Bayesianism close off a well-established and widely deployed path to handling the cumulative weight of evidence. And they offer no lucid alternative, indeed no alternative at all.

The Subjectivism Objection

Bayesian reasoning is also allegedly “subjective” because nothing “objective” constrains prior probabilities.

First, this is a peculiar objection coming from those survivalists whose reasoning about survival is seemingly unconstrained by *anything*, including the standard forms of argument one encounters in an introductory course in critical thinking. It is also an odd sort of objection given the tendency of more sophisticated survivalists to appropriate (Fisher or Neyman-Pearson) significance tests to leverage facts in favor of survival or against non-survival counterexplanations. Some of the motivation of adopting these methodologies is a pretense to achieve a kind of objectivity that is not attainable in any domain of inquiry. As Howson and Urbach have noted, “virtually none of those [frequentist] methods can be applied without a generous helping of personal judgment and arbitrary assumption” (Howson & Urbach, 2006, p. 9). For example, the hypothesis one ends up accepting or rejecting depends on which hypothesis one initially accepts as the null hypothesis, but the null hypothesis is selected from a wider set of competing hypotheses. Selection here is pragmatic, if not arbitrary. Stopping rules (i.e., the criteria used to determine when to stop data collecting or a statistical experiment) and p-values (used to quantify the statistical significance of a test result) are equally subjective and arbitrary, guided by the researcher’s preferences and goals, or simply a matter of convention (Ibid., pp.131-182).²⁴

Second, it is not generally true that nothing “objective” constrains prior probabilities. Priors are often empirically defensible (Sober, 2008, pp. 24–26). Of course, priors are *sometimes* not empirically defensible. In that case, a rational agent should use Bayes’ theorem to rationally update their beliefs, which is one of the goals of Bayesian epistemology. Subjective Bayesianism – the interpretation of Bayesianism in which there are no empirical constraints on initial prior probabilities – is concerned with rules for how to properly regulate one’s subjectivity

(Sober, 2008, pp. 11–12, 26, 31–32). Bayesian reasoning is analogous to deductive reasoning in this respect. Deductive logic gives rules to guide what inferences you ought or ought not to make given that you begin with whatever premises you begin with; it does not give you advice on what premises to begin with, nor does it tell you whether your premises are rationally acceptable (Howson and Urbach, 2006, pp. 265–266, 301–302). Ideally, we would like Bayesian posterior probabilities to have probative force, and this is more plausible when there are empirical constraints on priors. But I see no reason why empirical facts are unable to inform judgments about the prior probability of the survival hypothesis. And there is good reason to think they do, though in a way unfavorable to survival (Augustine, 2022a, pp. 371–374; Augustine & Fishman, 2015).

The survivalist preoccupation with priors is a distraction from the more salient issue of the comparative expectedness of the data under competing hypotheses. As a result, it distracts from the many interconnected problems associated with generating the required (Bayesian or likelihoodist) likelihood inequalities to be discussed in subsequent sections of the paper. But sufficient for the moment are the criticisms thereof. Survivalist objections to prior probabilities are overrated, confused, and implausible.²⁵ To the extent that survivalist criticisms of Bayesian analyses rest on such objections, they carry no force.

Summing Up Insights from Confirmation Theory

As in the wider corpus of survival literature, the BICS essays make frequent use of phrases that express ideas of confirmation and evidential support, but on the whole the essayists poorly navigate the conceptual territory they parachute themselves into with the use of such language. Consequently, operative phrases like “___ is evidence for survival,” “___ supports the survival hypothesis,” “___ favors the survival hypothesis over alternative explanations,” and “___ better fits the survival hypothesis than the alternatives” are not disambiguated and sufficiently clarified. But these and similar phrases pick out different epistemologically important concepts that need to be carefully distinguished. And these must also be sharply distinguished from rules designed to guide decision-making procedures. As Elliott Sober has explained, the value of likelihoodism and Bayesianism is their ability to provide formal proposals that shed light on informal concepts. “A formal proposal that describes how an informal concept should be understood is to be judged by the light it throws on the informal concept, but it also should be judged by the light it throws, period” (Sober, 2008, p.

35).

To sum up the key points of the Bayesian and likelihoodist viewpoints:

- Each viewpoint tells us that likelihood inequalities are a crucial determinant of evidential support, which can be captured by their respective likelihood ratios.
 - O evidentially supports H_1 over H_2 just if $\Pr(O | H_1)/\Pr(O | H_2) > 1$.
 - O evidentially supports H (full stop) just if $\Pr(O | H)/\Pr(O | \sim H) > 1$.
- Each viewpoint tells us that if an observation O is evidence for a hypothesis H, then O is evidence against some alternative to H. In Bayesianism, the alternative is H’s negation; in likelihoodism the alternative is some specific competing hypothesis. Bayesianism and likelihoodism are both contrastive in this broad sense.

Bayesian confirmation tells us what to believe. (IC) tells us when we should increase our degree of confidence in a hypothesis. (CP) tells us how to determine which of two specific competing hypotheses has the greater posterior probability. (AC) provides the criterion for showing that a hypothesis has a favorable posterior probability (above $\frac{1}{2}$) and, therefore, would provide a robust justification for believing a hypothesis.

- Likelihoodism captures an important intuition about evidential support via the favoring relation, and thereby tells us which of two competing hypotheses the evidence favors.
- Bayesian explanationists hold that the best explanation is the hypothesis with the highest posterior probability, and the better of two rival explanations is the one with the higher posterior probability. (CP) provides the criterion for the latter, and (AC) provides the criterion for the former. A likelihoodist explanationist can use (LL) to at least partially parse explanatory power.

In later sections of the paper, I will show how likelihoodist and Bayesian approaches help identify important errors in survival arguments which informal approaches to evidence evaluation mask. Hence, confirmation theory has an important heuristic value. This will be a further development of what I have argued in previous publications (Sudduth, 2013a, 2013b, 2014, 2016), namely that the comparative expectedness of the data captured by the likelihood ratio highlights the crucial yet problematic role

of auxiliary assumptions in survival arguments. The likelihood ratio depends on likelihoods, and the latter, in turn, depend on auxiliary assumptions. However, if the likelihood function depends on *unwarranted* auxiliary assumptions, it cannot be effectively used to test hypotheses or generate evidential support for a hypothesis.

6. Back to Braude

We previously saw (in §4) that Braude infers the following two claims from the explanatory power of the survival hypothesis:

(5') The explanatory success of the survival hypothesis is *evidence* for the truth of the survival hypothesis.

and

(5'') The explanatory success of the survival hypothesis is a *reasonable* basis for belief in postmortem survival.

Based on the discussion in §5, we can assess why Braude's (5') and (5''), though initially modest, are nonetheless problematic. Subsequently, I will show how the previous digression into theories of evidence sheds light on some of the errors encountered in the Augustine-Braude et al. exchange and the wider survival debate.

First, it is not clear what Braude means by "evidence" or how he is construing its relationship to "explanation." We need more clarity here. He speaks of certain features of the best cases *tilting* the scales in favor of survival (Braude, 2003, p. 216). But this is ambiguous between the principle of contrastive posteriors (CP) and the law of likelihood (LL) – that is, an ambiguity between (a) the *posterior probability of the survival hypothesis is higher, given the evidence, than the posterior probability of the best rival explanation conditioned by the same evidence* and (b) the *evidence favors the survival hypothesis over the best rival hypothesis*.

I think Braude's reasoning is better explicated using (LL). First, he is skeptical or at least cautious about enlisting prior probabilities to do epistemic work (ibid., pp. 302–303), and he does not contrast the survival hypothesis with its negation (the Bayesian catchall likelihood). Second, he repeatedly appeals to what we would *expect* given a rival hypothesis (ibid., pp. 48, 88, 95) and what we would *expect* given the survival hypothesis (ibid., pp. 6, 52, 72, 94–95, 179, 304–305). It is true that Braude issues caution about our expectations for what the evidence should look like if survival is true. For example, he says, "we're unable to predict with any confidence at all what the data *should* look like" (ibid., p. 19; cf. p. 222). But (LL)

does not require that the survival hypothesis predict the data, nor does it require a high degree of confidence in what the survival hypothesis would lead us to expect. It only requires that we have reasons supporting contrastive expectations that favor the survival hypothesis, however tentative or qualified these may be.

So, I think it is relatively clear that Braude is not offering a Bayesian-style survival argument of either the (IC), (CP), or (AC) variety covered in the previous section. It is at least tempting to regard Braude as a covert likelihoodist who relies on (LL) to explicate explanatory efficacy.²⁶ At any rate, the survivalist's explanatory advantage, as Braude understands it, *can* be codified in terms of likelihood inequalities between survival and particular competing hypotheses, the strongest of which is, in Braude's view, the appeal to living-agent psychic functioning.

One illustration of Braude's covert reliance on (LL) or something close to it is worth noting. It is his argument from crippling complexity, which he says gives the survival hypothesis a "slight explanatory advantage" over the motivated living-agent psi hypothesis (ibid., pp. 86–95, 99, 218, 305–306). His argument is framed entirely in terms of implicit likelihood inequalities between the survival hypothesis and the alternative explanation. The context is mediumship, and the relevant observational data are "the *amount* of veridical material revealed during sittings" and "the consistency with which subjects provide it" (ibid., p. 91), where this includes sustained trance personae in mediumship. Among other things, Braude argues that "the more super we allow psychic functioning to be, the less likely it becomes that a medium's ESP could produce an extended and accurate trance persona" (ibid., p. 94; cf. p. 90). He also says, "If psi cannot overcome the problems of task complexity and multiple sources of information, then it will be too weak to account for the best actual cases" (ibid., p. 94). The core of Braude's argument from crippling complexity is an attempt to justify these likelihood inequalities. So, it is plausible to interpret Braude's evidential claims in terms of (LL)'s favoring relation.²⁷

Of course, a (LL) styled survival argument would not tell us what we should believe, nor how probable or plausible the survival hypothesis is. At the most, it would tell us that the features of the best cases that Braude identifies (strongly) favor survival over the motivated living-agent psi hypothesis (or some other rival hypothesis). This does not justify *belief* in survival, at least not in any robust sense. But it is no less significant for reasons canvassed earlier in connection with Royall's question – what does the evidence say? Moreover, if likelihood inequalities are baked into explanatory power, then (LL) gives us a reason to believe (5'), but it does not give us a good rea-

son to accept (5''). (LL) does not answer the question of what we should believe or whether we ought to increase our degree of confidence in a hypothesis.²⁸

That said, I think Braude's (5') and (5'') are in themselves fairly innocuous. I suspect Augustine would agree. At all events, neither (5') nor (5'') is incompatible with Augustine's criticisms of the BICS essays. The potential problem lies elsewhere.

Braude's endorsement of (5') and (5'') seems to depend on:

(4) The survival hypothesis S is the best available explanation of O_1, O_2, \dots, O_n ,

which in turn is partly based on the premise:

(3) No available competing hypothesis R explains O_1, O_2, \dots, O_n as well as S does.

Since Augustine provides several reasons for doubting, even denying, (3) and (4), we have here a plausible point of actual disagreement between Augustine and Braude et al. As I read the exchange, **the heart of the debate between Augustine and Braude et al. concerns a dispute about whether the survival hypothesis has an explanatory advantage vis-à-vis a subset of the data which has an alleged immunity against being explained away by non-paranormal hypotheses.**

I will subsequently discuss several issues that further illuminate this apparent point of disagreement. Here I simply note two points.

First, on a Bayesian view, the best explanation is the one with the highest posterior probability. While Augustine has elsewhere provided a Bayesian analysis of the survival hypothesis (Augustine & Fishman, 2015), I have given several reasons for supposing that Braude's positive argument for survival is better interpreted as a likelihoodist argument. But doubting or denying that the survival hypothesis is the best explanation *in the Bayesian sense* is logically consistent with affirming that the survival hypothesis is the best explanation of certain data *in the likelihoodist sense*. On the Bayesian view, prior probabilities matter, as does the marginal probability of the data $\Pr(O)$, the denominator in Bayes' theorem. Unlike a likelihoodist IBE argument, a Bayesian IBE requires that we consider how probable the evidence is if the survival hypothesis is *not true* – that is, we need to determine how probable the evidence is given the disjunction of all possible alternatives to the survival hypothesis. On this view, simply determining that the survival hypothesis better leads us to expect some data than does this or that rival hypothesis is inadequate.

Second, even if Augustine and Braude disagree about (3) and (4), this is tangential to Augustine's critique of the BICS essays. His critique focuses on strong epistemic claims – for example, absolute confirmation claims – and the reasons survivalists adduce in support of such claims. Braude et al. neither support nor defend such strong claims. Nor does the endorsement of IBE survival arguments do the job here, unless they are robustly formulated to permit the otherwise contentious inference from "best explanation" to "highly probable explanation." Absent that, and especially in the light of the gap between Bayesian and likelihoodist IBEs, it is unclear how Braude, et al. can use mere explanatory considerations to undercut Augustine's critique of the BICS essays or his argument against the survival hypothesis being more probable than not given the totality of the evidence. I will subsequently show how this derails the Braude et al. critique in connection with the evidential implications of neurophysiological data suggestive of mind-brain dependence and facts surrounding mediumship that seem to significantly reduce the evidential force of even the better demonstrations of mediumship.

7. Varieties of Skepticism

Before looking more closely at the reply to Augustine, we should consider another recurring theme that Braude and his coauthors make use of in their criticisms of Augustine. They refer numerous times to Augustine's "skeptical position" and his "skeptical arguments" (Braude et al., 2022, pp. 400, 409, 404–405). And no less than nine times, they align his skeptical stance with the "anti-survivalist" position, five of which occur in the space of eight consecutive paragraphs (Ibid., pp. 403, 405, 408–409). Unfortunately, this language fails to properly characterize the position Augustine takes in his BICS critique. It also resembles the undisciplined use of such language in the Contest's essays, where *skeptic* and *skepticism* are pejorative words used to dismiss any position that disagrees with the preferred survivalist viewpoint. Survival research has long been committed to this kind polemically charged advocacy language (Hart, 1959, pp. 252–263). What is needed, though, is more nuance to adequately capture different critical stances or attitudes toward the survival hypothesis and the arguments made on behalf of it.

Consider a vanilla form of the survival hypothesis:

S: The consciousness of at least some persons persists after biological death.

What is a skeptical position toward S? For any propo-

sition p , one can *affirm* p , *deny* p , or *withhold* p . So, there are two basic ways to characterize skepticism. A skeptic could be someone who denies S , that is, believes that S is false. Perhaps they think S is self-contradictory or are convinced that there is a sound deductive argument for supposing that S is false. Or maybe they think there are good reasons for supposing that S is probably false. Call this **denial skepticism** (hereafter, D-skepticism). Alternatively, someone might withhold the belief that S – they consider the proposition S and neither believe S nor believe not- S . Maybe they believe there is no sufficiently good reason either to affirm S or to deny S . Call this **withholding skepticism** (hereafter, W-skepticism).²⁹

There is also **argument skepticism** (hereafter, A-skepticism). This is skepticism about *the cogency of an argument* for some proposition. If you think an argument lacks cogency or you are unconvinced of its cogency, then you are an A-skeptic with respect to that argument. So, you are an A-skeptic concerning the survival hypothesis if you deny or doubt the cogency of some argument(s) for survival.³⁰ A-skepticism typically informs D- or W-skepticism, but it does not entail being a D- or W-skeptic with respect to the survival hypothesis itself. Similarly, rejecting the cogency of arguments for the existence of God does not make someone an atheist.

Skepticism is clearly Janus-faced. But what kind of skeptic is Augustine?

Augustine made it clear that, given the totality of the relevant evidence, personal discarnate survival is possible but highly unlikely. For example, he said, “The totality of the evidence renders discarnate survival highly unlikely” (Augustine, 2022b, p. 412). In the body of his reply to Braude et al., he said, “I’ve always characterized this [neuroscientific] evidence as rendering personal survival highly unlikely, not impossible” (Ibid., p. 423). So, Augustine’s skeptical position includes D-skepticism. Braude et al. correctly picked up on this skeptical dimension to Augustine’s wider viewpoint and body of work, though they regrettably mischaracterized it in places – for example, attributing to Augustine the view that survival is impossible (Ibid., p. 407; cf. p. 404).³¹

However, there is more going on in Augustine’s essay. While it is fine to acknowledge what Augustine *thinks* about the survival hypothesis all things considered, it is more important to focus on what Augustine *intends to argue* in his essay. Unfortunately, preoccupation with the former question hampered a properly calibrated response to the latter question.

- In his reply to Braude et al., Augustine says his respondents lost sight of “whether the critiqued [BICS] essays met their directive to provide ‘hard evidence

beyond a reasonable doubt’ of the survival of human consciousness” (Augustine, 2022b, p. 412). He later reiterates that his “directive was to critically evaluate the arguments for discarnate personal survival” (Ibid., p. 415). He criticizes his respondents for shifting the focus away from this and leaving “the adequacy of the arguments found in the BICS essay competition unresolved” (Ibid., p. 429).

- Consider the bookends to his initial essay: “The overall evidence doesn’t even make personal survival more probable than not” (Augustine, 2022a, p. 366) and “The evidence doesn’t even make personal survival more probable than not” (Ibid., p. 390). He repeats this at the end of his reply: “I thus stand by my original conclusion: given the evidence as a whole, discarnate personal survival is not even minimally more probable than not” (Augustine, 2022b, p. 429). I am inclined to take Augustine’s point here to be that the overall evidence presented in *the BICS essays* fails to be sufficiently indicative of a marginal probability in favor of survival. But to the extent that the BICS essays are the best arguments on offer, we are right to draw a broader conclusion: the type of phenomena at the center of the BICS essays do not make the survival hypothesis at least more probable than not.
- Nearly all the fallacies Augustine puts in bold in his initial critique and reply – for example, cherry-picking, begging the question, confirmation bias, stacking the deck, hasty conclusion – concern the arguments *for* survival lacking cogency. These critical considerations are designed to *undercut* the survivalist inference, not *rebut* it. Undercutting an argument involves losing the reasons for accepting the argument’s conclusion, whereas rebutting an argument involves acquiring reasons to deny the argument’s conclusion. Arguing that the survivalist has not presented good reasons to accept that the survival hypothesis is more probable than not is distinct from arguing that there are good reasons to deny the survivalist’s conclusion.
- Augustine is cognizant of W-skepticism and links it with perceived defects in arguments for psi and survival. In referring to the failures of tests for psi, Augustine says, “Their failure gives the scientific community good reason to doubt the existence of extrasensory perception (ESP)” (Augustine, 2022a, p. 371). “Many are thus skeptics of discarnate personal survival simply because the evidence in its favor is hardly compelling” (Ibid., p. 389). “Some skeptics may simply point out that empirical survivalists have not made their case for personal survival without committing to a position on the survival question” (Augustine, 2022b, p. 415).

While Augustine *thinks* discarnate survival is improbable, the bulk of his critique concerns a negative assessment of *the arguments for survival* in the BICS essays. Of course, most of the BICS essayists also make claims about how they see the evidence as a whole. Augustine is arguing that their arguments for a strong favorable net assessment do not succeed. He is challenging the cogency of the arguments presented in the essays, not presenting an all-things-considered argument to support D-skepticism, though many of his points would be relevant to such an argument, which he has elsewhere developed in detail (Augustine, 2016; Augustine & Fishman, 2015). So, although Augustine is a denial skeptic with respect to discarnate survival, in his critique, he mostly deployed argument- and withholding-skeptical arguments. As I will show in the subsequent discussion, Braude et al. lost sight of the Janus-faced character of Augustine's skepticism at crucial points and misconstrued the kind of skeptical argument he was presenting.

8. Neurophysiological Evidence and the Survival Hypothesis

Several of Braude et al.'s specific complaints against Augustine emerge in connection with questions in the philosophy of mind and the interpretation of neurophysiological data. They present two general criticisms of Augustine's critique. They say he "carefully avoids discussing two matters of great importance: (1) not simply the strongest reasons but any reasons for challenging his negative appraisal of particular cases and (2) arguments exposing how unverified assumptions and hasty inferences pollute the received view of the relevant physiological data" (Braude et al., 2022, p. 400). As they see it, this allows Augustine to make "his skeptical position seem more substantive than it really is" (Ibid., p. 400).

It is unclear what any of this actually means in the context of Augustine's actual arguments. What are the "two matters" supposed to be of great importance to? Presumably, the plausibility of Augustine's skeptical position. But *which* skeptical position? This question matters because the force of the criticism here depends on the kind of skeptical position Augustine is arguing for in his paper. As I have shown, **Augustine was targeting the cogency of the arguments presented in the BICS essays and the collateral contention that the arguments represent a scientific approach to survival.** So, we would need to consider how the two matters Braude et al. introduce bear on Augustine's reasons for claiming that the arguments for survival in the Contest's essays lack cogency and scientific validity, as opposed to how the two matters

bear on other kinds of skeptical arguments – for example, arguments which purport to show that survival is all things considered improbable.

Augustine's Surprise Principle Argument

Consider the argument to which Braude et al. are ostensibly responding, though regrettably, they only tersely and opaquely reference it (Braude et al., 2022, p. 409). If we look at the section of Augustine's paper in which he examines the evidential implications of neurophysiological and related scientific data about consciousness and brain functioning (Augustine, 2022a, pp. 371–375), his main point was that **the BICS survivalists either ignore or mishandle data/facts that ostensibly disconfirm the survival hypothesis.** Recall that his wider argument concerns the alleged failure of survivalists to properly weigh the force of all the relevant evidence, partly because they mishandle ostensible counterevidence. He raises a similar criticism in connection with the survivalist responses to apparent experimental failures regarding psi and survival – I will discuss this later. In the present context, he argues that there are scientific facts which strongly confirm the mind-brain dependence thesis, and therefore, strongly count against the independence thesis, and hence, against the hypothesis of discarnate survival (Ibid., p. 371).

To understand why Augustine thinks survivalists ignore or mishandle the alleged counterevidence to survival at this juncture, we have to first consider why *he* thinks the scientific facts he identifies are counterevidence to the survival hypothesis. Counterevidence in this context is any proposition that "constitutes evidence against discarnate personal survival" (Ibid., p. 371) or, more technically, which "lowers the probability of discarnate survival" (Ibid., p. 374).³² Augustine relies on the *Surprise Principle*, an important principle of evidential support which codifies "the basic idea behind inference to the best explanation" (Ibid., p. 374).

Augustine quotes philosopher of science Elliott Sober on the Surprise Principle:

The Surprise Principle describes when an observation *O* strongly favors one hypothesis (H_1) over another (H_2). There are two requirements:

- (1) If H_1 were true, then you would expect *O* to be true.
- (2) If H_2 were true, then you would expect *O* to be false.

That is, (1) if H_1 were true, *O* would be unsurprising; (2) if H_2 were true, *O* would be surprising.

(Sober, 2012, p. 30)

The Surprise Principle (hereafter, SP) is an informal expression of one of the important confirmation-theory insights discussed at length in §5, namely the evidential significance of likelihood inequalities.³³ It covers instances of the law of likelihood where $\Pr(O | H_1) = \text{high}$ and $\Pr(O | H_2) = \text{low}$. However, unlike the law of likelihood, it also covers instances where the contrasting hypotheses are H and $\sim H$ (Bayesian catch-all) and $\Pr(O | H) = \text{high}$ and $\Pr(O | \sim H) = \text{low}$. We can also think of the SP as the qualitative expression of the (Bayesian or likelihoodist) likelihood ratio when it is (much) greater than 1.

Augustine argues that the scientific facts he lists (Augustine, 2022a, p. 371) strongly favor the dependence hypothesis (*consciousness depends on a functioning brain*) over the independence hypothesis (*consciousness is independent of a functioning brain*) because the facts are what we would expect if the dependence thesis were true, but they are not what we would expect if the independence thesis were true. The independence thesis is the negation of the dependence thesis (and conversely), so the contrasting hypotheses are mutually exclusive and jointly exhaustive.

Let F = Augustine's list of scientific facts, D = the dependence hypothesis, and $\sim D$ = the independence hypothesis. In standard form, Augustine's argument looks like this:

- (1) If D were true, then we would expect F to be true.
- (2) If $\sim D$ were true, then we would expect F to be false.
- (3) F

Therefore:

- (4) F strongly favors D over $\sim D$.³⁴

The crucial premises are (1) and (2). Augustine deploys a mail bin thought-experiment to show why we would be strongly inclined to regard these premises as true (ibid., pp. 371–372).³⁵ Given SP, (4) follows necessarily from (1), (2), and (3). Since D and $\sim D$ are mutually exclusive and jointly exhaustive, evidence that strongly supports D is evidence against $\sim D$. So, F are strong evidence against the independence thesis. Since discarnate survival entails $\sim D$, evidence against $\sim D$ is evidence against discarnate survival.

Since Augustine is clear about when a fact would be evidence *for* a hypothesis, he is also clear about when facts would be evidence *against* a hypothesis. Part of Augustine's wider interest is to show that survivalists are not clear about either of these two vital points. Consequently, several of the Contest's essayists fail to prop-

erly address salient ways in which neurophysiological and other empirical data provide even *potential* evidence against discarnate survival, much less how to weigh it against the evidence which ostensibly supports the survival hypothesis. More precisely, **survivalists fail to acknowledge how scientific data at least potentially undermine their reasons for supposing that the survival hypothesis is beyond reasonable doubt or has some other extremely high epistemic credential.**

The Surprise Principle and Posterior Probability

Before looking at the Braude et al. reply to Augustine on the neurophysiological evidence, some clarifications on Augustine's use of SP are necessary.

The conclusion of the SP argument means that the observational evidence under consideration strongly counts for D and against $\sim D$. This does not mean that D is (highly) probable or that $\sim D$ is (highly) improbable. This is a consequence of the concept of contrastive support. Likelihoods alone do not yield conclusions about the probability of hypotheses, and the SP argument relies only on the contrasting likelihoods of D and $\sim D$. As Bayesians say, no probabilities in, no probabilities out. Likelihoods must be combined with priors to yield posterior probabilities. The SP argument is not any less weighty on account of this, as it informally expresses an important concept of evidential support. Remember the summary point in §5 – whenever an observation is evidence for a hypothesis, it is also evidence against some alternative hypothesis.

Moreover, it is relatively easy to modify the SP argument by introducing priors so that it yields a favorable posterior probability for the mind-brain dependence thesis. This is not the focus of Augustine's arguments in his BICS critique, but it is important to note, especially in light of the survivalist errors discussed in §5 concerning Bayesian analyses. For example, if we supplement SP with the principle of indifference, then we would assign equal prior probabilities to D and $\sim D$. Each would be *as probable as not*. But if $\Pr(D) = 0.5$ and $\Pr(\sim D) = 0.5$, then the likelihoods expressed by premises (1) and (2), which entail a Bayesian likelihood ratio of greater than 1, automatically result in the dependence thesis being probable and the independence thesis being improbable.³⁶ We can arrive at the same conclusion by initially assigning the independence thesis a very *high* probability. Assume $\Pr(\sim D) = 0.9$ and so $\Pr(D) = 0.1$ and suppose that the likelihood ratio = 2. Now apply SP iteratively to four independent facts, updating the prior with each iteration. It would only take four independent pieces of evidence to cumulatively raise the probability of the dependence thesis above $\frac{1}{2}$ and so render the independence thesis improbable.

The previous point is important for two reasons. First, Augustine elsewhere invokes the principle of indifference to make judgments about the net plausibility of the survival hypothesis (Augustine & Fishman, 2015). This partially explains why, in his BICS critique, he says that the survival hypothesis is not even more probable than not. Second, the analysis once again shows that, in the context of the survival debate, prior probabilities are considerably less important in Bayesian analyses than likelihoods. The likelihood ratio, not prior probabilities, are doing the real work of evidential support.

The Complaint Against Augustine

Having seen how Augustine leverages the neurophysiological data, as well as how it could be leveraged by expanding Augustine's argument with the introduction of priors, we can examine what Braude et al. argued in their response to Augustine's appeal to such data.

Braude et al. claim that Augustine avoids discussing "arguments exposing how unverified assumptions and hasty inferences pollute the received view of the relevant physiological data... there are serious reasons for relaxing our commitments to standard interpretations of the neurophysiological data and entertaining possibly radical alternatives" (Braude et al., 2022, pp. 400–401). They illustrate this by adducing evidence against the claim that memories are located in the brain. When they address mind-brain correlational data which Augustine made use of, they say, "But what are they evidence of? Augustine's anti-survivalist position is only an option, and probably it seems compelling primarily to *those antecedently committed to, or caught in the grip of, a prevailing conventional scientific view of the world*" (Ibid., p. 407).

What strikes me here is what Braude et al. do not say. Despite the length of their discussion on the neurophysiological data, they do not comment on Augustine's SP argument, nor his reasons for claiming that the Contest's essayists fail to properly engage the evidential issues the SP argument brings into sharp focus. They do not argue that the premises of the SP argument are false or otherwise unwarranted. They do not argue against the inference from the premises to the conclusion. Nor do they argue that SP is an incorrect principle for assessing when facts evidentially support one hypothesis over another. And nothing they say provides a defense of the Contest's essays against Augustine's reasoned criticism that the essays fail to properly handle ostensible counterevidence and so fail to show that the survival hypothesis has the epistemic credentials they attribute to it.

Moreover, Braude et al. miss a crucial point. Even if we thought that the neuroscientific facts to which August-

tine appeals in his argument are insufficient to support the "anti-survivalist position" or outweigh considerations favorable to the survival hypothesis, those considerations would still potentially undermine the BICS essayists' exaggerated claims on behalf of the survival hypothesis, especially when we examine the reasons they offer for their claims. No antecedent commitment to a prevailing scientific view of the world is required to understand how Augustine is leveraging the neurophysiological facts against the arguments to which he is responding, nor is such a commitment needed to see that his argument is cogent. And since Braude et al. do not acknowledge the argument Augustine actually presented, they are unable to show how the considerations they adduce are even relevant. **What is at issue is whether the SP argument undercuts the survivalist arguments to which Augustine is responding and supports premise [A2] in Augustine's (previously outlined) basic argument.**

But we should consider this further.

First, Braude et al. introduce considerations against Augustine's mind-brain dependence *interpretation* of the facts. They try to raise doubt about the hypothesis that a functioning brain is necessary for consciousness. This is a perplexing dialectical strategy for three reasons.

- Augustine made it quite clear *what* the correlational data are evidence for and *why* they are evidence for it. His SP argument shows in a straightforward way why the correlational data *are* evidence for mind-brain dependence and thus support that particular "interpretation" of the data. It is necessary to address that argument since, if cogent, it justifies the very interpretation of the data with which Braude et al. wish to take issue. Instead, they introduced their own reasons for doubting or denying the mind-brain dependency hypothesis. This is not properly responsive to Augustine's reasons for affirming that conclusion. An argument is not addressed, much less defeated, simply because one adduces reasons for the opposite conclusion. One must show that such reasons outweigh the reasons in support of the original conclusion.³⁷ So, to counter Augustine's argument, Braude et al. would have to have shown that their reasons for doubting or denying the dependence thesis are stronger than Augustine's stated reasons for supposing that the data he cites strongly support it over the independence thesis.
- "Unverified assumptions and hasty inferences" may very well "pollute the received view of the relevant physiological data," but what matters is whether they pollute *Augustine's* argument. Braude et al. did not show that they do.
- The cogency of Augustine's SP argument is compatible

with there being *some reason* to doubt the dependence thesis, just as it is compatible with unverified assumptions and hasty inferences polluting the received view. This is because Augustine presented a specific argument for a particular conclusion about the empirical data. In the absence of evidence to the contrary, his argument is no more saddled with the defects of other physicalist arguments than Braude's arguments for survival in his winning BICS paper are saddled with the unverified assumptions and hasty inferences that pollute much of the received view of the relevant data for survival.

Second, in reference to the facts that Augustine says are expected given the dependence hypothesis, Braude et al. (Ibid., p. 409) say these data are also expected given the brain-is-an-instrument version of the independence hypothesis. This appears to be a *sotto voce* concession to the validity of the Surprise Principle, the only time they acknowledge it. However, what is required is (i) *showing* that the data are expected given the brain-is-an-instrument version of the independence hypothesis and (ii) *showing* that the data are more expected given their preferred hypothesis than the alternative. Recall the point (in §5) that a hypothesis must be tested against an alternative. Without such an argument, we have no reason to believe that the data favor their hypothesis. And, unless they can show that the data are just as likely given their preferred hypothesis, they do not succeed in neutralizing the evidential support that the data lend to the dependence thesis and against discarnate survival.

Third, even if Braude et al. could show that Augustine's scientific facts are at least as probable given the brain-as-instrument independence hypothesis as they are given the dependence hypothesis, a problem remains. Augustine's SP argument contrasts the dependence and independence theses, where these are comparably simple versions of the hypotheses. He argued that given *these* two contrasting hypotheses, the former better leads us to expect the data. Braude et al. claim that the brain-as-instrument view which McTaggart proposed can accommodate these facts. Perhaps, but this amounts to bulking up the vanilla independence hypothesis to accommodate the facts, but now we are contrasting a robust version of the independence thesis and a simple version of the dependence thesis. This is the same kind of conceptual sleight-of-hand Braude accused survivalists of in his Contest essay (Braude, 2021b, p. 8) and which he cautions against in his collaborative response to Augustine (Braude et al., 2022, p. 403). It is always possible to bulk up predictively impotent hypotheses with additional assumptions so that the hypothesis becomes robust enough to lead us to

expect the observational data, or any data for that matter. Augustine drew attention to this fallacy:

[O]ne can always contort any hypothesis to fit any facts, just as one can hammer at a square peg to force it into a round hole. The key to assessing the degree of evidential support is to start with what the most basic version of each hypothesis predicts. What do their *simpliciter* versions – the hypotheses unamended with auxiliary assumptions, or at most only amended with agreed-upon/confirmed auxiliaries – lead us to expect? (Augustine, 2022a, p. 372; cf. 2022b, p. 424)

Regardless of which version of the independence hypothesis Braude et al. wish to adopt, they must show in a non-question-begging way that their hypothesis accommodates the data in question. Simply asserting it is insufficient. We must see the assumptions that have been added to the hypothesis to permit this accommodation, compare the competing hypotheses in their equally robust forms to see whether the bulked-up independence hypothesis better leads us to expect the data, and then ask whether the accommodation has a price tag that would bankrupt the case for survival.

To his credit, Augustine pointed out the minimum requirement:

[T]hey should at least *try* to show (not merely assert) that (1) the dependence thesis does not predict this evidence, or else that (2) the independence thesis would lead us to expect the same evidence just as much. (Augustine, 2022a, p. 374)

Their failure to meet this challenge invited Augustine's poignant rejoinder:

To show that the dependence and independence theses are evidentially on par, Braude et al. (2022) would have had to have *shown* (not merely asserted) that either the dependence thesis would not lead us to expect my bulleted agreed-upon facts, or else that the independence thesis would lead us to expect them *just as much*. But they did *neither*. (Augustine, 2022b, p. 427)

Augustine dialed in a fatal flaw, not only in the Braude et al. reply, but in the bulk of survival literature. **What is ultimately at issue – I will subsequently discuss it in greater detail – is the epistemic status of the auxiliary assumptions we must employ to tightly or even loosely**

connect survivalist conjectures to observational data.

This is the needed conversation if the survival debate is to have enough lucidity to merit any further serious consideration or exploration.

9. The Data From Mediumship

Another general criticism Braude et al. raise is that Augustine “carefully avoids discussing... not simply the strongest reasons, but any reasons for challenging his negative appraisal of particular cases” (Braude et al., 2022, p. 400). One particular species of cases they have in mind is from mental mediumship, specifically the mediumship of Mrs. Piper.

Augustine on BICS Survivalists on the Data of Mediumship

Before looking at Braude et al.’s criticisms, we should get clear on the context of Augustine’s discussion of mediumship and the conclusion he aimed to support. His discussion occurs in two sections of his paper: the failures of positive results in experiments designed to test the survival hypothesis (Augustine, 2022a, pp. 368–371) and the Contest’s essayists ranking of the survival evidence, including mediumship (ibid., pp. 376–379). In each case, **Augustine argues that the BICS essayists make important mistakes in their reasoning in support of a favorable conclusion about mediumship being good evidence for survival.** I will subsequently discuss the former, but with respect to the latter, Augustine argues that the survivalist mistakes include not properly weighing, in some cases ignoring, features of mediumship that potentially undercut their strongly favorable net assessments of mediumistic data. Augustine discusses four such concerns: (a) the mixture of twaddle and accurate information in Mrs. Piper’s sittings, (b) her demonstrably fictitious controls, (c) the specter of fraud, and (d) the possibility that Mrs. Piper had access to information via ordinary channels of knowledge. I will consider these in due course.

Braude et al. on Augustine’s Criticisms

After providing a block quote from Augustine on the relevance of (a)–(d) to overall plausibility assessments of the data of mediumship as evidence for survival, Braude et al. respond with several interesting counterclaims (Braude et al., 2022, pp. 400–401). They claim that Augustine did not provide positive evidence in support of the hypothesis of fraud or the hypothesis that Mrs. Piper relied on ordinary sources of information. Instead, they claim, Augustine appealed only to the *possible* truth of such hypotheses. They also claim that Augustine ignored the reasons why many survivalists think these counter-

explanations of Mrs. Piper’s mediumship are improbable.

Braude et al. have raised some interesting general issues here. But whether their points undermine Augustine’s critique will depend on what Augustine intended to argue and how he argued it, as well as what Braude et al. mean by Augustine’s “negative appraisal.”

A negative appraisal of Mrs. Piper’s mediumship could mean any one of the following:

- The data provide no evidence for survival.
- A person could not be rational and regard the data as evidence for survival.
- The data do not make survival more probable than not.
- The data do not make the survival hypothesis highly probable.
- The data do not prove survival beyond a reasonable doubt.
- The survivalist has not shown that the data from mediumship are evidence for survival, good evidence for survival, make the survival hypothesis more probable than not, make the survival hypothesis highly probable, prove survival beyond a reasonable doubt, etc.

These different kinds of negative appraisal have different consequences for what can sensibly be required of a skeptic. In Augustine’s case, one of his arguments concerning mediumship involves a negative appraisal of the reasoning of Delorme, Radin, and Wahbeh (2021) – hereafter, DRW – as well as Michael Nahm (2021). Augustine’s conclusion is that *their arguments* lack cogency because *they* mishandle potentially defeating evidence in *their* favorable net plausibility assessments – for example, in the high letter grade (B+) they assign to such cases.³⁸ The main negative appraisal Augustine gives at this juncture is the final item on the list above. Braude et al. obscure this important dialectical point. Consequently, it looks as if they are picking out some of Augustine’s *claims* as a foil for refuting something Augustine is not actually arguing. Since Braude et al. do not provide a clear statement about what sort of evidential claim on behalf of survival they think is justified, the extent to which they disagree with Augustine is not clear.

What is perspicuously missing from Braude et al. are claims that counter a clearly identified premise in Augustine’s argument, challenge the inferential link between his premises and conclusion, or which appropriately counter Augustine’s conclusion. For example, Braude et al. did not argue that DRW’s argument for assigning the letter grade of B+ to the totality of the data from mediumship is warranted, nor do they show that Augustine’s argument, which was intended to undercut DRW’s favorable conclusion, is fallacious or otherwise weak. And this

is particularly odd, seeing as DRW were among Braude's coauthors. Instead, Braude et al. criticize Augustine for failing to provide positive evidence for his alleged suggestion that Mrs. Piper engaged in fraud or mined information from ordinary sources. But this demand is rooted in a misunderstanding of what Augustine is actually arguing and illicitly shifts the burden of proof. **Augustine's argument does not require providing evidence for the alternative hypotheses, because he is not arguing for such counterexplanations. He is arguing that survivalists have failed to adequately rule out such counterexplanations** (Augustine, 2022b, p. 415).

In Defense of Augustine

It is tempting to suppose that Braude et al. have simply conflated

(1) Mrs. Piper's achievements were the result of fraud or the acquisition of information through ordinary sources.

and

(2) Survivalists have failed to adequately rule out (1).

As already indicated, Augustine is arguing against the cogency of survival arguments as presented in the BICS essays. Some of the essays appeal to the mediumship of Mrs. Piper. In those cases, it is sufficient to argue (2), and it is not necessary to argue for (1) in order to support (2).

Braude is familiar with this strategy of argument. He has argued at length that survivalists have failed to rule out certain recalcitrant counterexplanations of the data, principally the motivated living-agent psi hypothesis (Braude, 2003, pp. 10–29). For example, he has argued that survivalist efforts to rule out this particular counterexplanation depend on false or unwarranted assumptions (Ibid, pp. 12–14), and he has elsewhere appealed to epistemic possibilities to counter survivalist criticisms of the appeal to motivated living-agent psi (Ibid., pp. 14, 16). Braude's arguments here do not depend on his providing positive evidence that the persons under consideration actually exhibited psi functioning, had particular motivations, etc. This is because, in the context in question, Braude was attempting to *undercut* specific survival arguments, not offer a positive argument *for* his motivated living-agent psi hypothesis.

But there is more going on here that needs to be fleshed out.

First, Braude et al. suggest that Augustine shows only the possibility of fraud or the possibility of the medium acquiring information from ordinary sources. But

survivalists and their sympathizers have often claimed of such-and-such a medium, or of some particular sitting, that fraud was *impossible* or *inconceivable*, or that the medium *could not* have acquired certain information through ordinary sources (Hart, 1959, pp. 52–69).³⁹ Prominent early reports on Mrs. Piper's sittings routinely make such claims, rarely supported by any kind of argument – for example, Hodgson (1898, p. 285), Lodge (1890, pp. 446–447), and Myers (1890, pp. 438–440). William James, too. He claimed that Mrs. Piper “showed a most startling intimacy” with details of the private lives of sitters, “talking of many matters known to no one outside, and which gossip *could not possibly* have conveyed to her ears” (James, 1886, pp. 15–16, emphasis mine). Braude et al. quote this very passage from James, and they do so adjacent to their complaint against Augustine (Braude et al., 2022, p. 400). This makes their criticism of Augustine look implausible on the face of it. When researchers claim that a medium *could not possibly* have engaged in fraud or *could not possibly* have acquired information through ordinary means, gossip or otherwise, such claims are refuted by showing that fraud or the ordinary acquisition of information was *possible*, or that these exaggerated claims are otherwise unwarranted.

Second, mediumistic fraud is not merely (logically or epistemically) possible. Fraud is known to have frequently occurred in ostensible displays of physical and mental mediumship. Survivalists have long acknowledged this, which is why *the Proceedings* of the British and American Societies for Psychical Research are replete with efforts to address this problem and mitigate its impact on the case for survival. Augustine cites additional literature regarding this (Augustine, 2022a, p. 378), including investigations into the physical mediumship of Kai Mügge by Braude and Nahm (Braude, 2014, 2016; Mulacz, 2015; Nahm, 2014, 2015, 2016). The latter case also illustrates how seasoned investigators can fail to prove the extent of fraud in cases involving fraud despite the investigators implementing experimental controls over many sittings spanning several years. Mediumistic fraud exists. It has always existed since the early days of psychical research. And it has been significant enough to merit considerable attention by researchers. The sensible dispute is how we should weigh the frequency of known instances of fraud in our general assessments of the evidence from mediumship, as well as how it should bear on our assessment of particular cases. The latter is especially true in cases where a medium has not been caught engaging in fraud, even though investigators trained in trickery implemented strategies for uncovering fraud but were unable to confirm it.

On this matter, Braude et al. wrote:

What matters is not whether fraud is possible, but whether it is actual, and whether (or to what extent) the evidence for a properly conducted experiment or investigation outweighs the evidence for fraud. Moreover, although there is a clear and rich history of mediumistic fraud... one cannot generalize from tainted cases to impugn the entire body of mediumistic evidence. (Braude et al., 2022, p. 406)

Whether the generalization in view here is warranted will depend largely on the nature of the impugning. The known widespread occurrence of mediumistic fraud is one of several factors that ought to inform our initial plausibility assessments of particular mediums, including Mrs. Piper. This does not require the logically fallacious inference *some mediums have been shown to be fraudulent, therefore all mediums are frauds*. Survivalists are fond of attributing this strawman argument to skeptics (Hart, 1959, p. 52, 255).⁴⁰ Braude et al. come close to doing the same in the quote above.

What looks more promising is their reference to *weighing* the evidence for fraud against the evidence for a properly conducted investigation or experiment.⁴¹ I would like to have seen Braude et al. develop their point in greater detail, especially since Augustine argues that survivalists – for example, Nahm and DRW – do not properly weigh considerations of fraud and other contravening factors in *their* net assessments. But also, had Braude et al. developed their point a bit more, we might have a better understanding of how they propose to weigh the evidentially salient aspects of mediumship. We would presumably have a better idea of their criteria of evidential support. As far as I can see, Augustine is the one who offered an evidential marker here. Braude et al. did not. Consequently, an important conversation about how to weigh the evidentially salient aspects of a case did not occur.

My own view is that the “clear and rich history of mediumistic fraud” ought to inform initial plausibility assessments, or at least be an important *constraint* on favorable conclusions we draw about the evidential force of mediumship in general. This is what we observe in our wider doxastic practices.⁴² Moreover, whether the failure to uncover fraud in particular cases ought to override initial skeptical assessments will depend on the particulars of the situation – for example, the reliability of the strategies deployed to obviate fraud in its different manifestations, overt and covert. In the case of Mrs. Piper, there is some reason to doubt the adequacy of Hodgson’s protocols, as well as his less than unimpeachable documenta-

tion of Mrs. Piper’s sittings (Gauld, 2022, pp. 92–93, 99; Munves, 1997).

Braude et al. also ignore Augustine’s more nuanced point that a medium’s seemingly impressive display of veridical information, including the kind that impressed William James, can be created whole cloth by the *combination* of undetected exposure to ordinary sources of information and various strands of the improbability principle – for example, the law of sufficiently large numbers, the probability lever, and the law of near enough (Hand, 2014). Nor is this scenario a mere (logical or epistemic) possibility. I have previously shown (Sudduth, 2021b, pp. 1006–1009) and Augustine references (Augustine, 2022b, p. 414) how such a scenario easily generates the misleading appearance of survival, *even without intentional fraud*. The protocols of past researchers – James and Hodgson, for example – were not sufficiently fine-grained to screen for these more subtle scenarios.

Furthermore, dark data at least complicate the evaluation of mediumship, even in the absence of conscious fraud. No investigator can reasonably claim omniscience, so there will be facts that did not register on the investigator’s radar. In some cases, these overlooked or unnoticed facts can significantly impact how we should interpret the case. I have elsewhere shown this in connection with the James Leininger reincarnation case (Sudduth, 2021b, 2022a),⁴³ but it also applies to mediumship. And the older a case is, the more difficult it is to mitigate this problem. Mrs. Piper’s mediumship took place over a century ago. It is doubtful that we can *now* know the kind of salient facts which, had they been known *then*, would have dissolved the convincing appearance of survival. And the methods of her investigators did little then to ameliorate the dark data problem for us now.

Nothing I have said implies that Mrs. Piper’s mediumship has no evidential value. What is at issue is how strong that evidence is. **While the above skeptical considerations – mine and Augustine’s – may not be strong enough in themselves to altogether undercut Mrs. Piper’s mediumship as evidence *simpliciter* for survival, they do pose a more serious challenge to the notion that Mrs. Piper’s mediumship strongly supports the survival hypothesis.** Skeptical considerations need not be deployed to show that certain data provide no evidence for survival at all. They can and often are deployed to deflate the extravagant assertions of survivalists and the bloated nature of their arguments. This is Augustine’s primary target in his BICS critique. Augustine’s so-called “negative appraisal” of mediumship is a negative appraisal of the extravagant, unwarranted conclusions prominent survivalists have drawn from insufficient, albeit interesting, data.

But Braude et al.'s demand that Augustine should produce positive evidence for mediumistic fraud or dependence on ordinary sources of information is otherwise mistaken. In the absence of a clear statement concerning what survivalists would accept as positive evidence, it would be premature for Augustine to attempt to meet the demand. After all, Braude et al. run roughshod over Augustine's effort to provide positive evidence for mind-brain dependence, even though he grounded his argument in a clear and widely deployed principle of evidential support. Until survivalists and their sympathizers are clear about *their* criteria of evidential support, the prospects for constructive dialogue with their critics remains bleak, and rightfully so.

To further illustrate the need for a more developed survivalist epistemology at this juncture, consider the following: survivalists tend to disregard the prior probability of fraud as positive evidence of fraud. Indeed, as shown in §5, they seem to disregard prior probabilities altogether, and for transparently bad reasons. Moreover, survivalists routinely claim that fraud can co-exist with genuine paranormal abilities or communications from the deceased. Survival literature is littered with such concessions to mixed mediumship, even in connection with Mrs. Piper. Survivalists have accused Mrs. Piper, or at least her secondary personality Phinuit, of fishing, deception, and other illicit techniques of information acquisition. So, even if skeptics were to adduce positive evidence that a particular medium engaged in fraud on some occasion(s), what reason is there to believe that survivalists would regard such facts as evidence against the medium's alleged extraordinary abilities? What non-question-begging reason is there to suppose that a mixed medium is a genuine medium who engages in fraud half the time as opposed to a complete fraud who has only been half found out? Survivalists, not skeptics, have the burden to explain how we can separate the mediumistic wheat from the mediumistic chaff.⁴⁴

Finally, to return to my earlier point, Augustine was not arguing that fraud or gossip is a sufficient rival explanation of the data. This is a misreading of Augustine's otherwise lucid argument. Claiming that his "dismissal" of Mrs. Piper's mediumship requires that he "demonstrate that his gossip hypothesis has some evidence in its favor, and also that it is adequate to a wide range of facts" (Braude et al., 2022, p. 400) is a plausible requirement only if he were arguing that the gossip hypothesis provides an at least equally good explanation of Mrs. Piper's mediumship. That may or may not be true, but it requires a different kind of argument, not the one Augustine is making. **He was arguing that survivalists overstate the evidential force of mediumistic data in part because they**

ignore the subtle ways information can be aggregated into a narrative, giving the misleading appearance of survival. This is precisely the context of the Augustine block quote Braude et al. give us (Ibid., p. 400).

Elsewhere in their reply, Braude et al. make the same logical mistake when speaking more broadly of anti-survivalists:

We have seen that anti-survivalists must do more than assert that evidence suggesting survival can be accounted for by appealing to the possibility of fraud or other Usual Suspects. They must wallow in the grubby details and show that fraud (or whatever) is either likely or actual. (Ibid. p. 403)

By parity of reasoning, a survivalist could argue against Braude as follows: *Braude must do more than assert that evidence suggesting survival can be accounted for by appealing to the possibility of motivated living-agent psi; he must wallow in the grubby details and show that motivated living-agent psi is either likely or actual in said cases.* Such an objection misses the nuanced nature of Braude's criticisms of traditional survival arguments, namely their being directed "to show just how daunting of a task it is to rule out super-psi explanations" (Braude, 2003, p. 23). Augustine's point is that something similar is true in the case of mediumship when it comes to ruling out conventional explanations or failing to let such explanations constrain the net assessment of the evidence. In Augustine's view, the BICS essays fail at this point. And nothing Braude et al. argue comes remotely close to showing that this is not the case.

10. The Alleged Improbability of Fraud and Other Counterexplanations

But have survivalists not shown that fraud, chance-coincidence, the influence of ordinary sources of information, and other non-paranormal alternatives to survival *are* improbable, at least in the better cases of mediumship? Braude et al. accuse Augustine of ignoring such improbabilities:

Granted, Augustine mentions that private detectives tailing Mrs. Piper never found anything suspicious. But he is mute on the significance of the many times Mrs. Piper got intimate hits with anonymous sitters she was meeting for the first time—including proxy sitters and people who, during the medium's visit to England, happened to be traveling through Cambridge. So although

it is certainly relevant that Mrs. Piper was never caught cheating, survivalists do not need to rely on a never-caught-cheating card. Augustine simply ignores the strongest reasons for thinking that cheating is highly improbable. (Braude et al., 2022, pp. 400–401)

I agree with Braude et al. that the survivalist’s “strongest reasons” for thinking that cheating is highly improbable deserve attention. In fact, they deserve more attention than survivalists themselves have given them. I will scrutinize these alleged reasons below. But it is important to first appreciate why Augustine did not address these “strongest reasons.” As he explained in his reply to Braude et al., the criticism that he ignored the strongest reasons for supposing that cheating is highly improbable is based on a misunderstanding of his argument (Augustine, 2022b, p. 414).

Augustine and Mrs. Piper’s Mediumship

First, the relevant part of Augustine’s discussion is his assessment of how Nahm (2021) and Delorme, Radin, and Wahbeh (DRW) (2021) rank the evidence from mediumship in their essays. The latter argue that the evidence merits a letter grade of B+, and Nahm offers a similar favorable score-card assessment. Augustine argues that neither DRW nor Nahm offers cogent arguments for their respective conclusions. He offers several considerations, most of which have nothing to do specifically with Mrs. Piper, but which have everything to do with net assessments.⁴⁵ Augustine is arguing that these survivalists have not provided a good enough reason to accept *their* conclusion(s) about the strength of mediumistic evidence. And this is because they have poorly handled potentially contravening evidence in their net assessments. If we shift attention specifically to Mrs. Piper, we have the circumstances in which Mrs. Piper demonstrated “intimate hits” (positive evidence). What we need to ask about this positive evidence is whether it is as strong once contravening factors are introduced. Otherwise put, **the issue is how positive evidence and contravening factors are weighted against each other in our net assessments of the evidence.**

Second, since Augustine was responding to Nahm and DRW, he selected features of Mrs. Piper’s mediumship which they, principally Nahm, had mentioned in their papers. If Augustine was mute on the features of Mrs. Piper’s mediumship which Braude et al. mention, it was only because the survivalists to whom he was responding were mute on this matter. Three of the contributors to Braude et al. were Delorme, Radin, and Wahbeh, and the

above criticism of Augustine seems more appropriately directed to Braude’s coauthors, who neglected to give prominence to these aspects of Mrs. Piper’s mediumship, merely listing her name as one among several “historically well-documented cases of accurate mediums” (Delorme, Radin, & Wahbeh, 2021, p. 13).

Moving Beyond Impressionistic Reasoning

Nonetheless, Braude et al. have raised an issue that bears on the wider survival debate, specifically in connection with how survivalists purport to rule out counterexplanations. It has been common for survivalists to claim that certain counterexplanations are implausible or improbable, and so must be rejected. This plays an important role in IBE survival arguments since such arguments must “rule out” rival explanations. Since Braude et al. raised this specifically in connection with the mediumship of Mrs. Piper, I will consider it largely in that context.

First, survivalists from Hodgson forward typically do not *argue* that cheating is improbable, at least not explicitly. They *assert* its improbability as a matter of personal impression, belief, or opinion. True, they cite reasons why they *regard* the fraud hypothesis as improbable, but they do not show that such reasons *make* the fraud hypothesis improbable. Consequently, it looks like “the improbability of fraud” is merely a subjective probability embedded in a personal narrative. It is a report of the survivalists’ own degree of incredulity at the suggestion that fraud was at work. Unsurprisingly, commentators such as Hart (1959, ch. 4) have done little more than make an appeal to the authority of investigators such as Hodgson, James, Myers, Tyrrell, and Drayton Thomas, who were confident that fraud was improbable. But what is required is an argument that shows that those reasons are good reasons for supposing that fraud is improbable.

Second, Braude et al. suggest that the strongest reasons are not that Mrs. Piper was never caught cheating, even though detectives shadowed her at various times. The lion’s share of improbability seems to be based on “the significance of the many times Mrs. Piper got intimate hits with anonymous sitters she was meeting for the first time—including proxy sitters and people who, during the medium’s visit to England, happened to be travelling through Cambridge” (Braude et al. 2022, pp. 400–401). This is a start, but what we need to know is why anyone not antecedently committed to the truth of the survival hypothesis ought to regard the fraud hypothesis as improbable *given such facts*. We need an argument from these facts to the conclusion that fraud is improbable. Braude et al. do not present such an argument, nor source anyone who does.

So, let me suggest one.

Consider the following argument. (i) *Mrs. Piper's mediumship had certain features O*, (ii) *if Mrs. Piper were cheating, O would be quite surprising – that is, O would be improbable. So, we should conclude that (iii) the fraud hypothesis is improbable.* The same kind of argument can be run for the chance-coincidence hypothesis and influence from ordinary sources of information, or any combination of non-paranormal alternatives to survival. The argument relies on the observation O and a likelihood – $\Pr(O | \text{fraud}) = \text{very low}$ – and concludes that $\Pr(\text{fraud} | O) = \text{very low}$. Therefore, we can rule out the fraud hypothesis.

Let me flesh out the argument. What kind of observations are such that they would allegedly be highly improbable given the fraud hypothesis? If Mrs. Piper cheated, then it would be improbable that she would be able to convey the quantity and quality of veridical data that she did, especially given the introduction of sitters under pseudonyms, removing her from her native locale (Boston) and placing her in an unfamiliar social environment (England), etc. Perhaps this is what Braude et al. are suggesting when they appeal to such positive evidence. But it applies to the never-caught-cheating card, too. After all, one can argue that it is improbable that Mrs. Piper would have never been caught cheating if she had been cheating, given the use of spies and the efforts of skeptics to ferret out deception. Michael Sage wrote, “during the fifteen years the experiments [with Mrs. Piper] have continued, all the suggestions made by sceptical and sometimes violent objectors have been kept in view, that the fraud might be discovered, if fraud there were. All has been in vain” (Sage, 1904/2007, p. 38).⁴⁶

The Argument of the Sophisticates

I did not invent the above argument *de novo*. It actually originates from an early phase in the history of parapsychology and survival research. I refer to it as the argument of the sophisticates because it at least has the veneer of being logically rigorous. Unlike the impressionistic reasoning of many survivalists, it makes explicit use of probabilistic reasoning in the form of arguments relying on statistical data.

One good example is John Thomas (1937). He argued that the chance and fraud hypotheses were each improbable as explanations of experimental results with mediums because these hypotheses confer extremely low probabilities on the data collected. He provided a detailed description of the arrangements and circumstances of various sittings with different sensitives and mediums, including Mrs. Osborne Leonard, with attention to protocols designed to obviate fraud. Thomas rejected the idea

that a mere high percentage of hits is evidence of the absence of fraud. “Indeed,” he says, “definiteness, high veridicality, and striking accuracy in a series of records might be expected from effective fraudulent practices” (ibid., p. 129). Instead, he emphasized experimental protocols that would make it improbable, though not impossible, that the quantity of hits could be fraudulently produced – for example, the anonymity of sitters, switching out of stenographic recorders, no advance notice of the sittings, a large number of sittings over many years, and the use of diverse locations. He also considered different go-betweens to assist in fraud (ibid., pp. 132–148) and paid particular attention to the content of sittings, including facts remote in time, obscure in nature, or only naturally accessible at remote locations. If the fraud hypothesis were true, then many improbable things would also have to be true. “Fraud,” he concluded, “is improbable in the highest degree” (ibid., p. 129). And, “The fair conclusion, then, is that the fraud explanation, while not absolutely impossible, is fantastically incredible” (ibid., p. 148).

This type of reasoning is clearer in connection with the examination of the chance-coincidence hypothesis, which is more amiable to mathematical calculations of probability. Saltmarsh and Soal (1930) presented a method for estimating the value of evidence for paranormal knowledge as compared to chance in the sittings of Mrs. Warren Elliott. Saltmarsh, with the assistance of statistician R.A. Fisher, calculated that the recorded hits in a particular sitting with Mrs. Warren had a probability of one in a thousand million given chance. “I submit,” Saltmarsh said, “that this result is such that the hypothesis of chance alone could have produced this amount of veridicality is definitely excluded” (ibid., p. 271). Similarly, Thomas (1937) claimed, in connection with other experiments, that the statistical analysis showed that given chance, the probability of the various results ranged from $5 \text{ in } 10^7$ to $4 \text{ in } 10^{39}$ to $10 \text{ in } 10^{40}$. He concluded, “one may definitely exclude the hypothesis that chance alone can account for the degree of veridicality in these data” (ibid., p. 163).

The Fallacy of Probabilistic Modus Tollens

The above examples suffice to show that parapsychologists and survivalists *have* presented arguments to show that, with respect to mediumship, the fraud and chance hypotheses are improbable. Unfortunately, the form of argument on which they have relied to show this is bogus. The purported inference is based on a commonly encountered fallacy in probabilistic reasoning. I suspect that parapsychologists and survivalists who commit this mistake do so because of an incorrect use of R.A. Fischer’s

problematic statistical significance tests.

Happily, I am not the first one to identify this fallacy. C.D. Broad discussed it in his critical remarks on the statistical analyses of results in parapsychological experiments:

Suppose that a certain hypothesis would, if accepted, render *extremely improbable* certain propositions which are found on observation to be *true*. Then, that extreme improbability is reflected back on the hypothesis, and it becomes unreasonable to accept it. This may be compared with the following principle, which is certainly valid. Suppose that a certain hypothesis would logically entail the *falsity* of certain propositions which are found on observation to be *true*. Then the hypothesis must be rejected as *false*. (Broad, 1962, pp. 74–75.)

Broad here compares the purported probabilistic inference to a perfectly valid form of deductive inference known as *modus tollens*: for any propositions, p and q , if p then q , not q , therefore not p . As Broad says, it looks like the suggested inference is a probabilistic version of the valid inference: if p , then probably not q , q , therefore (probably) not p . Sober has referred to this as **probabilistic modus tollens**. Sober and Royall have shown why the inference is a flaw in Fisher's significance tests (Royall, 1997, pp. 65–68; Sober, 2008, pp. 48–58). Broad also showed why the argument was unacceptable (Broad, 1962, p. 79). One salient point raised by Broad, Royall, and Sober is that **hypotheses must be tested against an alternative**. As the earlier DNA match example illustrated, we need to know whether O is more probable under H_2 than it is under H_1 , not simply whether O is improbable given H_1 . In the case of mediumship, the survivalist needs to show that the survival hypothesis confers a greater probability on the observational evidence than does the fraud hypothesis. The observations will then favor survival over fraud.

If one does not find the fallacious nature of the inference in question intuitively obvious, it is very easy to find examples of hypotheses that confer hugely low probabilities on an observation without the hypotheses themselves plausibly being regarded as having (hugely) low probabilities. Twenty-six consecutive black numbers came up on the roulette wheel at Monte Carlo in 1913, with odds of about 1 in 137 million (Hand, 2014, p. 83). This outcome was hugely improbable given that the roulette game was fair, but it is clearly implausible to infer that a fair roulette game was improbable merely because that hypothesis confers a hugely low probability on the outcome. Evelyn Marie Adams won the New Jersey lot-

tery twice in four months in the 1980s, with odds of one in a trillion (Ibid, p. 86). This outcome was also hugely improbable given that it was a fair lottery. It is more impressive than Mrs. Warren Elliott's mediumship, the results of which were one in a billion by comparison. So, if Saltmarsh's reasoning was correct in the case of Elliott, *a fortiori* the chance hypothesis should be excluded in the case of Evelyn Marie Adams. But this is absurd. We rightly do not conclude that the hypothesis of a fair lottery was improbable, and so must be rejected. We also should not regard the observation as evidence against the hypothesis. In both the Monte Carlo and lottery example, $\Pr(O | H) \neq \Pr(H | O)$; the respective probabilities are not even close.

What is the source of this error among survivalists? It may be a simple conflation of two kinds of conditional probabilities – $\Pr(H | O)$ and $\Pr(O | H)$. Hence, they think that since $\Pr(O | H) = \text{low}$, it must be that $\Pr(H | O) = \text{low}$. Survivalists who pay little attention to the rules of probabilistic reasoning are especially vulnerable to being duped by such fallacies. But I suspect that the more widespread cause of the error lies in the parapsychological and survivalist appropriation and misapplication of frequentist statistical theories. Survivalists often rely on statistical significance tests to draw conclusions. Several of the prize-winning BICS papers did exactly this (Beischel, 2021; Long, 2021; Neppe, 2021).⁴⁷ On a prevalent interpretation of such tests, we should reject a hypothesis when it makes the probability of some observation sufficiently low, for example, when $p < .05$ or $p < .01$. However, as the previous examples show, when a hypothesis confers a low probability on an observation, it is not reasonable to conclude that the hypothesis is improbable, that the observation is evidence against the hypothesis, or that we should reject the hypothesis. As previously illustrated, sometimes it is actually evidence *for* the hypothesis because the alternative hypothesis confers an even lower probability on the observation. Significance tests as a rule for epistemic evaluation and rejecting hypotheses on evidential grounds are simply incorrect (Royall, 1996, pp. 65–68; Sober 2008, pp. 48–58). Survivalists who rely on such reasoning are underwriting their survivalist claims with dubious inferences.

Braude et al. chided Augustine for not addressing the strongest reasons survivalists have for regarding fraud as improbable. Those strongest reasons appear to be either mere subjective credence or involve a fallacy in probabilistic reasoning. So, the reasons are either irrelevant or unreasonable. But since Braude et al. decided to raise the issue, I chose to put it to rest. Here we see another illustration of how the survivalist's "strongest reasons" for believing something turn out on further scrutiny to

be no good reason to believe it. And we can invoke Fisher against the survivalists who rely on his significance tests to draw unwarranted conclusions. As Fisher correctly pointed out, if a hypothesis *H* says an observation *O* is improbable and *O* occurs, then one of two things is true, either *H* is false or *something very improbable has happened* (Sober, 2008, p. 56). Survivalists have not offered any good reason to prefer the former possibility to the latter. Indeed, they seem oblivious to the options in the conceptual space.

11. Mediumship and the Logic of Confirmation

In the previous sections, I looked at Augustine and Braude et al. on some perennial issues related to mediumship, specifically the specter of fraud and the possibility that Mrs. Piper relied on ordinary channels of information. What is most relevant there, I have argued, is how Braude et al. consistently miss the structure of Augustine's arguments and leave crucial questions in the logic and epistemology of survival arguments unanswered.

In this section, I address other issues related to mediumship and the logic of confirmation covered in Augustine's critique and to which Braude et al. offer various criticisms.

Augustine wrote, and Braude et al. reproduce in their essay, the following:

. . . the fact that historical trance mediums' accurate statements must be fished out of reams of twaddle (James, 1909, p. 115) is surely relevant to any plausibility assessments here, as is the agreed-upon fact that a significant proportion of the entities that they claimed to contact were undeniably fictitious constructions of the mediums' own minds. Certainly, the latter more than offsets any gain provided by appealing to the "never caught cheating" card, which is hardly conclusive in any case since Mrs. Piper had access to gossip within a large web of her community connections. (Augustine, 2022a, p. 377)

Before looking at the criticisms, Braude et al. offer in response to this passage we need to clarify how Augustine intends to leverage his points. He is responding to the essays by DRW and Nahm, both of whom comment favorably on the total force of the evidence from mediumship. As indicated earlier, DRW assign mediumship the letter grade of B+ (in between good and strong evidence), and where B+ implies that the data are "implausibly explained by conventional science" (DRW, 2021, p. 10) and that there is "no plausible materialistic (psychology or

neuroscience) explanation" (Ibid., p. 11). Nahm refers to the "astonishing quantity and quality of accurate information" as among the "most compelling" facets of mediumship, adding that in the case of Mrs. Piper, the medium was shadowed by private detectives to determine whether she was acquiring information through ordinary means (Nahm, 2021, p. 11).

Augustine's criticism is that Nahm and DRW ignore or fail to properly weigh salient counter considerations – (i) the significant number of ostensible spirits being fictitious constructions of the medium's own mind, (ii) the mixture of accurate statements and twaddle, and (iii) Mrs. Piper's access to gossip as an ordinary source of information. (i) and (ii) are relevant to net plausibility assessments. They more than *offset* any gain the "never caught cheating card" provides, which cannot be *conclusive* on account of (iii). These considerations require that Nahm and DRW downgrade their highly favorable assessment of the evidence from mediumship or explain why such data make no difference to their favorable assessment.

The Evidential Relevance of Fictitious Controls

In response to Augustine's argument concerning fictitious controls, Braude et al. said, "as far as clearly fictitious mediumistic control personalities are concerned, even if one grants the reality of survival, the existence of these controls would not be surprising. They might even be exactly what many survivalists expect" (Braude et al., 2022, p. 400). This is an interesting point and potentially relevant to Augustine's argument. Augustine's suggestion is that the data on fictitious controls and twaddle count against or lower the probability of the survival hypothesis in a way not acknowledged or anticipated by Nahm and DRW. I would have liked Braude et al. to have better dialed in their point to Augustine's actual argument by adding, for example, *that while Nahm and DRW failed to mention the phenomenon of fictitious controls, it would not downgrade their favorable assessments because....* That would properly contextualize Augustine's argument.

The question remains, though, as to whether Braude et al. *can* successfully leverage the points they make at this juncture to dislodge Augustine's criticisms or otherwise reinforce the arguments Nahm and DRW present. I think this is a formidable task, and it reveals even deeper flaws in survival arguments. To see this, we need to address pertinent issues in the logic of confirmation.

Braude et al. say that the existence of Mrs. Piper's controls would not be surprising given survival, and they might even be what many survivalists expect. Of course, what survivalists might or might not expect as a matter of their psychology is irrelevant. What matters is wheth-

er the expectation is warranted, given the *content* of the survival hypothesis. Unfortunately Braude et al. only assert this; they do not show it. But showing it would be crucial to address Augustine's argument. Why exactly, in point of logic, are Piper's fictitious controls *not surprising* given survival? Two possibilities: (i) the hypothesis leads us to expect the data or (ii) the hypothesis does not lead us to expect the absence of the data. My vegetable garden may have tomato hornworms and blite. This may be unsurprising given the hypothesis that there is an invisible gardener who oversees it. Why? Because my hypothesis is *precise* enough to lead me to expect these data or it is *vague* enough to accommodate the data by not predicting that we should not observe the data. The same is true for fictitious controls and the survival hypothesis. The former may be unsurprising given the latter either because the survival hypothesis can be forced to fit any observational data – fictitious controls, fraud, alien abduction experiences – or because it has been bulked up enough to make predictions.

The Braude et al. reply hedges at this juncture. The first sentence (in the quote above) is compatible with both the survival hypothesis leading us to expect fictitious controls and the hypothesis not leading us to expect the absence of fictitious controls. The second sentence says the first scenario *might* be true. Braude et al. say "might" because they know that whether the survival hypothesis leads us to expect fictitious controls depends on auxiliary assumptions. Apparently, they do not wish to adjudicate this issue in their reply to Augustine. But there are problems here that undermine the attempt to neutralize Augustine's criticisms of Nahm and DRW.

First, suppose we have a very bold survivalist who says that *the survival hypothesis leads us to expect the existence and/or nature of fictitious controls*. This is insufficient. Remember, hypotheses must be tested against alternatives, in this case, either the negation of the survival hypothesis or some specific naturalistic, non-survival hypothesis. What matters is whether fictitious controls are *more* to be expected if survival is true than if survival is false (Bayesian likelihood), or whether they are *more* to be expected under the survival hypothesis than they are under some alternative naturalistic hypothesis (likelihoodist likelihood).

- If $\Pr(\text{fictitious controls} \mid \text{some naturalistic hypothesis}) > \Pr(\text{fictitious controls} \mid \text{the survival hypothesis})$, then the existence/nature of fictitious controls will favor the naturalistic hypothesis over the survival hypothesis, *even if the survival hypothesis leads us to expect such entities*. Similarly, under the Bayesian view, if $\Pr(\text{fictitious controls} \mid \sim \text{the survival hypothesis}) >$

$\Pr(\text{fictitious controls} \mid \text{the survival hypothesis})$, then the existence/nature of fictitious controls will lower the probability of the survival hypothesis, *even if the survival hypothesis leads us to expect such entities*.

- To neutralize the above counterarguments, the survivalist must show, not that the survival hypothesis leads us to expect fictitious controls, but at a minimum that $\Pr(\text{fictitious controls} \mid \text{naturalistic hypothesis}) = \Pr(\text{fictitious controls} \mid \text{the survival hypothesis})$, or to counter the Bayesian view, that $\Pr(\text{fictitious controls} \mid \sim \text{the survival hypothesis}) = \Pr(\text{fictitious controls} \mid \text{the survival hypothesis})$. That is, the survivalist needs at least to show that fictitious controls are *just as* expected given the survival hypothesis as they are given a naturalistic alternative or given the negation of the survival hypothesis.
- It is unclear how survivalists can successfully mount the neutralizing argument above.
 - They would have to enlist auxiliary assumptions to generate well-defined likelihoods and show that such likelihoods are approximately equal to the likelihood of a proposed naturalistic alternative or (more ambitiously) approximately equal to the catchall likelihood of the negation of the survival hypothesis.
 - The required auxiliary assumptions are likely to be at least as contentious as the survival hypothesis itself. They may be ad hoc or lack independent justification. (I will explore the problem of auxiliary assumptions in greater detail below.)
 - By contrast, given the well-understood human motivations that underlie fraud (mediumistic and otherwise) and the varied phenomena of abnormal psychology – for example, dissociative phenomena and savant syndrome – neither the existence nor the nature of fictitious controls is surprising if the survival hypothesis is false. And, unlike the survival hypothesis, no extravagant assumptions are required.

Perhaps this is why Braude et al. do not attempt to show that the survival hypothesis leads us to expect fictitious controls as much as naturalistic hypotheses do. Given their own comments about auxiliary assumptions, they are wise not to step on that landmine. But in that case, they cannot get sufficient leverage against Augustine's argument at this juncture.

Second, suppose we take the more modest view that the survival hypothesis does not lead us to expect that there should be no fictitious mediumistic controls. In that case, hasn't the survivalist successfully also blocked the inference to a disconfirming observation? No. If the con-

tent of the survival hypothesis does not lead us to expect anything one way or the other relative to the existence/nature of fictitious controls, why is this exactly? In the space of possibly true auxiliary assumptions that can be deployed to bulk up the survival hypothesis, there will be some that, when conjoined to the survival hypothesis, will lead us to expect fictitious controls and some that will lead us to expect no fictitious controls. How shall we choose? *Prima facie*, there is a problem here. There is no independent reason to favor one over the other. But this is arguably true for many auxiliary assumptions without which the survival hypothesis would lead us to expect precious little at all (Sudduth, 2016, pp. 214–218, 238–240). To that extent, there will be precious little in the way of observational evidence to support the survival hypothesis as well. Predictively impotent hypotheses may be shielded from empirical disconfirmation, but this comes with a steep cost: the loss of empirical confirmation. So, this move offers no help to the empirical survivalist.⁴⁸

Twaddle and Truth

The above points also apply to Augustine's appeal to mediumistic twaddle as a salient fact which survivalists poorly handle in their favorable net assessments of mediumship.

It is quite clear why, if mediumistic communications are *not* actually originating from deceased persons, we would expect considerable triviality, falsehoods, and unverifiable claims and extended discourses about the afterlife and mundane matters, especially where these reflect religious conceptions of the afterlife that were antecedently part of the cultural milieu. For example, it would be clear why Mrs. Piper's G.P. control would, unlike the living G.P., be incompetent in philosophy and literature. Like knowing French, philosophy is both a knowledge and a skill not easily reproducible by the medium who has little more than a passing acquaintance with such subjects. We would also expect communications to be a mixture of true and false statements, especially where (general and specific) true statements are contextually dependent on fishing, physical cues, rational inferences, the content of previous sittings, and exploiting aspects of the improbability principle such as the probability lever and the law of near enough.

From the perspective of the survivalist, though, things are not so clear. This is partly due to the survivalist's own assumptions. Survivalists wish to count accurate information conveyed to the medium as a confirmation of the survival hypothesis. The same holds for the medium's exhibition of personality traits and skills which

resemble the deceased. This is entirely reasonable, of course, if we are postulating the persistence of a person's psychological profile, especially their memories. Our ordinary, everyday judgments about personal identity depend to varying degrees on the recognizable psychological continuity of persons. The challenge for the survivalist is to sensibly explain how all that can count as a confirmation that the deceased is communicating through the medium, but the failure to observe such outcomes in any given sitting, or observing anything that conflicts with them, does not count as a disconfirmation of the hypothesis that a deceased person is communicating.

Let me clarify the problem here. One *can* invent a "theory" (hypothesis plus auxiliary assumptions) that will accommodate deviations from the survivalist's default expectations. Alan Gauld's "overshading" theory is one such example, perhaps the best on offer. And long before Gauld, thinkers such as Hodgson, Hart, and Ducasse toyed with tweaking the survival hypothesis to account for such deviations from default expectations. But this kind of reasoning does not succeed at immunizing survivalist arguments from skeptical criticisms. First, the effort to bulk up the survival hypothesis to accommodate apparently contrary data depends on ad hoc or otherwise epistemically suspect auxiliary assumptions. Second, the result is a survival model that can, in principle, accommodate pretty much any datum. But *a theory that accommodates everything predicts nothing*. Such a model is evidentially useless within a logically rigorous framework such as confirmation theory. Indeed, it seems useless given fairly prosaic standards of reasoning. This problem needs to be addressed if survivalists are to present something more substantial than a narrative that exhibits the illusion of evidential support.

Returning to the Braude et al. Reply

Braude et al. did not comment on the salient issues in the logic of confirmation, which are baked into Augustine's entire critique. This is unfortunate. We need a serious conversation about the justification of the kinds of auxiliary assumptions required for the survival hypothesis to generate even approximate or general expectations concerning how the empirical world should look if survival is true, as well as how it should look if survival is false. Again, it is interesting that Braude discusses this crucial issue in his prize-winning BICS essay, but he does not make use of those resources in response to Augustine, where they would have been most useful given Augustine's central criticisms. Instead, Braude et al. refer to Augustine's "cursory dismissal of Mrs. Piper's mediumship" (Braude et al., 2022, p. 400). They criticize him for failing

to consider positive evidence of her paranormal abilities, and they contrast it with the superior kinds of critical assessment found in Alan Gauld's work on mediumship.

These criticisms of Augustine are not calibrated to address his actual arguments. Unlike Gauld, Augustine was not offering an assessment of Mrs. Piper's mediumship *per se*, nor was he dismissing her mediumship *per se*. As the relevant passage from Augustine shows, he was offering a critical assessment of *survivalist assessments* of Mrs. Piper's mediumship. He was arguing that they ignore or mishandle facts – that pesky negative evidence – that are relevant to net assessments of mediumship, and he was focused particularly on this flaw in Nahm and DRW. To the extent that the arguments Augustine is critiquing incorporate the kind of positive evidence Braude et al. demand, his argument presupposes that evidence. To the extent that the arguments he is critiquing do not incorporate such evidence, it is not Augustine's oversight. Nor would it be relevant to Augustine's specific criticisms. He was not asked to improve on the arguments for survival in the BICS essays. If anything, that would have been a task for Braude et al. But the central issue here is not the implications of unstated positive evidence. It is the implications of survivalists not properly handling any of the stated counterevidence, and this remains an issue regardless of the survivalist's stock of positive evidence.

Since Braude et al. do not address Augustine's argument, there is no engagement with the crucial issue of how we ought to properly weigh ostensible counterevidence in the wider data set. Moreover, the need for survivalist transparency concerning the structure and cogency of their intended arguments goes unaddressed. Set aside the goal of advancing the survival debate. This is a lost opportunity to simply have a lucid debate.

12. The Significance of Failed Tests

The other confirmation-related issue concerns the implications of failed tests for survival. Here we need to distinguish between the implications of what survivalists routinely assume and the implications of adopting other kinds of assumptions. Augustine is primarily concerned with the former. He considers the importance of failed tests for the survivalist in connection with survivalist arguments concerning data collected from mediumship (Augustine, 2022a, pp. 368–370), OBEs/NDEs (ibid., pp. 369–370), and cases of the reincarnation type (ibid., p. 381).

Recall the wider context here, specifically **Augustine's basic argument** presented earlier:

[A1] If belief in the survival hypothesis is well-supported,

then it is proportioned to all of the available relevant evidence. (ibid., p. 371)

[A2] Belief in the survival hypothesis is not proportioned to all of the available relevant evidence. (ibid., pp. 371–384, especially pp. 374–375)

Therefore:

[A3] Belief in the survival hypothesis is not well-supported. (ibid., pp. 365, 390).

We saw earlier that neurophysiological data provide one kind of potential counterevidence to the survival hypothesis. According to Augustine, survivalists have not properly weighed this counterevidence in their strongly favorable assessments of the alleged evidence for survival. But they have also failed to properly weigh the counterevidence provided by their own failed experimental results. Augustine contends that this provides additional support for premise [A2] of his basic argument. He surveys a variety of unsuccessful survival tests. For example, mediums have consistently failed to decipher encrypted messages or open user-set combination locks in tests arranged by living persons to be executed posthumously by the formerly living person communicating keywords or phrases through the medium. And despite several decades of attempts to have OBE and NDE subjects identify visual targets, including in various controlled experiments, there have been no consistent positive results.

It is important to be clear about the conceptual framework of Augustine's argument. As he explains, survivalists have proposed empirical tests for mediumship. These tests assume that the survival hypothesis can be tested by the observational outcomes of experiments with mediums. More specifically, they assume that if the survival hypothesis is true, we would expect some observational datum. This is baked into IBE survival arguments. On this view, the survival hypothesis must *account* for the data, where this *accounting* requires that the survival hypothesis leads us to expect the observational data or leads us to expect the data more than alternatives do – for example, it leads us to expect that the medium would possess knowledge or exhibit personality traits or skills characteristic of the deceased. When these features occur in mediumistic sittings and alternative explanations are ruled out, survivalists attribute explanatory merit to the survival hypothesis, and they regard the data from the sitting as evidence for the survival hypothesis.⁴⁹

Here is the problem. Bayesian confirmation is *symmetric*. O confirms H just if not-O disconfirms H. As noted earlier, O confirms (= raises the probability of) H just if $\Pr(H | O) > \Pr(H)$, but this is equivalent to $\Pr(O | H) > \Pr(O | \sim H)$. An erratic EKG is more probable if someone is having

a heart attack than if they are *not* having a heart attack. So, O raising the probability of H entails that O is more likely to occur under H than it is under \sim H. But in that case, a normal EKG disconfirms (= lowers the probability of) the hypothesis that a person is having a heart attack. Hence, $\Pr(H | O) > \Pr(H)$ just if $\Pr(H | \sim O) < \Pr(H)$. So, for a hypothesis H to genuinely lead us to expect an observation O in the sense of *predicting* O, H cannot also lead us to expect \sim O or anything incompatible with O. Otherwise stated, if an observation O raises the probability of H, \sim O lowers the probability of H. By contrast, according to strict Popperianism some propositions are verifiable but not falsifiable – for example, there exists a black swan. Neither Bayesian nor likelihoodist models permit this with reference to confirmation/disconfirmation.

Augustine's criticism concerning the significance of failed experiments is a straightforward implication of the logic of hypothesis testing outlined above. He is criticizing survivalists for painting over outcomes that are not what *survivalists* would expect given the kind of observational data which *they* regard or would regard as confirmatory of the survival hypothesis. We have plenty of examples: communicators conveying twaddle, inaccurate statements, or their failure to give requested information the deceased would be uniquely positioned to know. Similarly, we have OBE and NDE subjects who fail to accurately report visual targets or children who make false claims about an alleged previous personality. And while it is easy to find claims made by children that correspond to autobiographical facts of a previous personality – this is supposed to be evidence for the reincarnation hypothesis – the challenge is to provide a net assessment that acknowledges and shows how disconfirming facts are being factored into the net assessment. This goes straight to premise [A2] of Augustine's basic argument.

A counterfactual scenario might help underscore Augustine's point. Suppose that the G.P. communicator had exhibited considerable fluency in philosophy, literature, and Greek and Latin. Would the survivalist not count such data as a confirmation of the hypothesis that G.P. was the surviving George Pellew? But if the survivalist would treat such a scenario as confirmatory of the survival hypothesis, then it is a crippling inconsistency to suppose that G.P.'s actual deviations from the knowledge and personality of George Pellew are not disconfirmations of the hypothesis that G.P. is the surviving personality of Pellew. Similarly, if an OBE or NDE subject's successful identification of a visual target counts as evidence for mind-brain independence, the inability to do this should count against that hypothesis. If a child's veridical information about a previous personality confirms the reincarnation hypothesis, a child's false claims about a previous personality should

count as a disconfirmation of the reincarnation hypothesis. Not decisively, of course, because neither disconfirmation nor confirmation is conclusive.

To be clear, Augustine is not leveraging experimental failures to support the claim that the survival hypothesis is (probably) false.⁵⁰ He is arguing that the failure of survivalists to acknowledge and show how they weigh experimental failures in their net assessment provides good reason to believe [A2]. This also undermines the favorable net assessments of the evidence in the essays Augustine was targeting. Since coherent testability criteria are essential to scientific reasoning, the essays do not represent a scientific approach to the alleged evidence for survival.

13. Survivalist Rescues and Contrastive Confirmation

Some survivalists have acknowledged the general problem in the previous section and have attempted to engage it. Unfortunately, their responses have been implausible. Instead of acknowledging the existence of data which count against the survival hypothesis and which therefore requires appropriately downgrading the weight of the total evidence, they try to neutralize the disconfirming implications of the data. Richard Hodgson provides an early example of this with respect to mediumship. He offered several conjectures designed to explain why mediumistic communications should have "obscurities and deficiencies" (Hodgson, 1898, p. 366) and that therefore these are features not bugs of the survival hypothesis.

Hodgson's complete discussion on the topic (*Ibid.*, pp. 366–392) is worth reading for context, but I will limit myself to a particularly apt portion of his discussion:

[I]f the "spirits" of our "deceased" friends do communicate as alleged through the organisms of still incarnate persons, we are *not* justified in expecting them to manifest themselves with the same fulness of clear consciousness that they exhibited during life. We should on the contrary expect even the best communicators to fall short of this for the two main reasons: (1) loss of familiarity with the conditions of using a gross material organism at all – we should expect them to be like fishes out of water or birds immersed in it; (2) inability to govern precisely and completely the particular gross material organism which they are compelled to use.... [T]he confusion and failure which we find in Mrs. Piper's trance communications, are so far from being what we

should *not* expect, that they are exactly what we *should* expect, if the alleged spirits are communicating. (Ibid., pp. 366–367)

There are at least three problems with Hodgson's reasoning.

First, we need not suppose that discarnate spirits will manifest themselves with the *same* fullness of clear consciousness they exhibited during life. This overstates the expectation and thereby suggests a strawman. The issue is whether the "obscurities and deficiencies" are what we would expect given the kind of consciousness required for (the same) discarnate spirits to convey the quality and quantity of veridical information they are assumed to communicate on other occasions. Or are the "obscurities and deficiencies" more probable given one or more non-survival hypotheses? Of course, if we have no independent reason to suppose, even approximately, what consciousness would be like if it should survive bodily death, then it might be hard to say for any datum whether it is more to be expected given the survival hypothesis than it is given some alternative hypothesis. But under Hodgson's suppositions, everything is permitted, or at least nothing is forbidden. His survival hypothesis has the virtue of accommodating anything. Unfortunately, this is indistinguishable from the vice of explaining nothing.

Second, Hodgson cites two reasons to support the claim that we should expect communicators not to exhibit the same fullness of clear consciousness they exhibited in life, but his supporting reasons are not more obviously true than the conclusion he wishes to derive. His (1) and (2) are *possibly* true, but in the absence of any independent reason to think that they are actually true, his reasoning begs the question and commits the error Braude et al. noted concerning the appeal to possibly true propositions as auxiliary assumptions (Braude et al., 2022, p. 403). C.D. Broad would later show why the kinds of assumptions Hodgson thought were natural are a small subset of a larger set of possible states of post-mortem consciousness, including various models of impersonal survival or Broad's "psychic factor," namely the persistence of the dispositional basis of the personality (Broad, 1962, pp. 387–430; Sudduth, 2016, pp. 33–46, 165–175). Hodgson provides no good reason to privilege his assumptions about survival over any number of the other assumptions we can make about the postmortem persistence of consciousness, but which would result in the data of mediumship *not* providing evidence for personal discarnate survival.

Third, a careful reading of Hodgson's wider discussion shows that the potentially disconfirming data – ob-

scurities, confusions, and deficiencies in the content of mediumistic communications – are allegedly what we would expect **not** if the survival hypothesis (simpliciter) is true,⁵¹ but *if the alleged spirits are speaking in the actual sittings Hodgson is describing*.⁵² The problem here is that the latter conjecture packs the observational data into the survival hypothesis, which is akin to already assuming one's conclusion in one's premises. Obviously, **if** the communicators are who they say they are, then the spirits exhibit obscurities and deficiencies. But notice that it is now a survival+ hypothesis – the survival hypothesis modified – that is doing the work for him. But the $\Pr(\text{a communicator's obscurities and deficiencies} \mid \text{survival+}) = 1$. And for the same reason the $\Pr(\text{cosmic fine-tuning} \mid \text{God caused the universe to be fine-tuned}) = 1$, and the $\Pr(\text{pepper plants thriving in inhospitable temperatures} \mid \text{an invisible garden fairy is causing the pepper plants to have immunity to inhospitable temperatures}) = 1$.

It should be immediately apparent that packing observations into one's hypothesis is a fatal flaw. Unless we are epistemic chauvinists, Hodgson's jerry-rigging is a maneuver a skeptic can equally exploit to undercut the survival inference. After all, *if the alleged spirits are not speaking in the actual sittings Hodgson is describing*, then the probability that a communicator would exhibit obscurities and deficiencies also equals 1. However, favoring requires likelihood inequalities. So, if we pack the observations into each of our competing hypotheses, the observations will favor neither hypothesis. This neutralizes the survival inference. Of course, it also makes hypothesis testing altogether impossible (Sober, 2019, pp. 34–35).

Here we come to a crucial point concerning the survival hypothesis and the contrastive nature of confirmation. The salient kind of experimental failures are observational outcomes that are contrary to what the survival hypothesis would otherwise lead us to expect. When confronted with such failures, survivalists should not ask how they can tweak the survival hypothesis to accommodate such data by fattening the hypothesis with some possibly true auxiliary assumption(s). They should ask whether and to what extent non-survival alternatives make such observations more probable than the survival hypothesis does and with far less contentious assumptions. Then, they should provide a clear account of how they factor such disconfirming observational data into their net assessments of the evidence in favor of the survival hypothesis. Hodgson did not do this, and subsequent survivalists have not advanced beyond Hodgson's fallacious reasoning.

Braude et al. understand the general problem here. They concede that survivalists cannot simply appeal to

mere *possibilities* to fatten the survivalist hypothesis and insulate it from critique:

In order to explain away or dismiss experimental failures, they [survivalists] must do more than appeal to the mere possibility of psi-inhibitory conditions. They must also provide reasons for thinking that those conditions were actually or probably obtained. And if they fail to mount that defense, then critics can justifiably complain that survivalists do not take experimental failures as seriously as they would take successes. (Braude et al., 2022, p. 403)

This is an important concession, but they should have made more of it, especially since it was prominent in Augustine's arguments. Also, Braude et al. speak generally of survivalists, but they say nothing about the survivalists whose essays were the focus of Augustine's critique. The question is, did *those* survivalists fail to amount the defense to which Braude et al. allude? Moreover, seeing as Braude et al. invoke *mere possibilities* in their counterarguments to Augustine (Ibid., pp. 400, 404–405), they should have provided reasons for supposing that such possibilities are actual in particular cases. This would have allowed them to illustrate or model the kind of defense they suggest above. As it stands, I agree with Augustine that Braude et al.'s comments at this juncture do not undermine his arguments (Augustine, 2022b, pp. 420–421, 427, 431n14).

14. Evidential Support without Predictions

In the preceding two sections, I have assumed the widely held view that the survival hypothesis (allegedly) *predicts* observations. Expressed as a likelihood, prediction requires that $\Pr(O | H) > \frac{1}{2}$. This formally codifies what is often meant by the expectation or the expectedness of an observation – that is, given the hypothesis, the observation is more likely to occur than not occur. Prominent survivalists and survival researchers have asserted or implied that the survival hypothesis makes predictions (Almeder, 1996, pp. 498, 504–505; Roll, 2006, pp. 167–170; Schmeidler, 1977; cf. Braude, 2021b, pp. 8–9). These same writers have tried to leverage this fact as evidential support for survival. However, it is possible to claim that psychical phenomena are evidence for the survival hypothesis even if the phenomena are not predictions of the survival hypothesis. This view is defensible given the contrastive model of evidential support codified under (LL), and this is especially important to the Augustine-Braude et al. exchange since (a) Braude is reluctant to say that

the survival hypothesis makes predictions (Braude, 2003, pp. 16–19) and (b) I have argued that (LL) can plausibly be interpreted as a criterion which underwrites some of Braude's survival-friendly claims.

Recall that according to (LL) an observation O favors H_1 over H_2 just if $\Pr(O | H_1) > \Pr(O | H_2)$, but this does not require that $\Pr(O | H_1) > \frac{1}{2}$. So evidential favoring does not require that either of the contrasting hypotheses predicts the observation. The accelerant that was present in a house fire is more probable given the arson hypothesis than the electrical malfunction hypothesis, but the arson hypothesis does not predict the accelerant. But, if an observation O can evidentially favor H_1 over H_2 without H_1 predicting O , then clearly observations could favor the survival hypothesis over some competing hypothesis, even if the survival hypothesis did not predict the observation. In that case, not observing O (or observing something inconsistent with O) would not disconfirm H_1 . This seems to defang the criticism in the previous two sections.

Another example. You know Corbin smokes Cohiba Cuban cigars, and Jeremy does not smoke at all. A Cohiba wrapper and remains of a recently smoked cigar were found near each other on the living room floor of a house that was broken into a few blocks from where Corbin and Jeremy live. $\Pr(\text{Cohiba Cuban cigar} | \text{Corbin broke into the house}) > \Pr(\text{Cohiba Cuban cigar} | \text{Jeremy broke into the house})$, but $\Pr(\text{Cohiba Cuban cigar} | \text{Corbin broke into the house})$ is not high, not even greater than $\frac{1}{2}$. The hypothesis that Corbin is the thief does not *predict* that we should find the remains of a Cuban cigar at the crime scene, though it is certainly less surprising that we would find it if Corbin is the person who broke into the house rather than Jeremy. Had there been no cigar remains left behind, we would not say *that fact* disconfirms the hypothesis that Corbin broke into the house, nor would we say *that fact* favors the Jeremy-broke-into-the-house hypothesis over the Corbin-broke-into-the-house hypothesis. Similarly, if there were a subsequent break-in at another house in the neighborhood but no Cuban cigar remains were found, this would not disconfirm the hypothesis that Corbin was the person who broke into the second house.

By parity of reasoning, a survivalist could adopt (LL) and maintain that data from mediumship, cases of the reincarnation type, near-death experiences, etc., favor the survival hypothesis over some conventional or exotic non-survival alternative – for example, cold reading, fraud, coincidence, or more exotic alternatives such as a motivated living-agent psi hypothesis. In which case, the survivalist only needs to argue that the survival hypothesis confers a greater probability on these data than does the alternative hypothesis. But the survivalist could quite

sensibly deny that the survival hypothesis predicts these data, that is, the survival hypothesis need not confer a probability $> \frac{1}{2}$ on the data.

To illustrate, consider Mrs. Piper's mediumship. Take the better G.P. hits to which Braude et al. refer. The survivalist can argue that these observations discriminate between the George Pellew survival hypothesis and an alternative, say, the cold reading hypothesis. The survivalist can argue as follows:

$\Pr(\text{Mrs. Piper's better G.P. hits} \mid \text{George Pellew is the communicator}) > \Pr(\text{Mrs. Piper's better G.P. hits} \mid \text{cold reading}),$

but not that

$\Pr(\text{Mrs. Piper's better G.P. hits} \mid \text{George Pellew is the communicator}) > \frac{1}{2}.$

In this situation, the observational data would favor the hypothesis that George Pellew is the communicator over the cold reading hypothesis. As with the evidence in the Cohiba Cuban cigar example, the survival hypothesis here does not *predict* the better G.P. hits, either the specific content or the more general fact that Mrs. Piper conveyed such detailed veridical communications about the life of Pellew. So, Mrs. Piper's errors and confusions about Pellew in various sittings would not be a disconfirmation of the hypothesis that George Pellew is the communicator. It would not lower the probability of that hypothesis. In fact, the entire idea of confirming and disconfirming a particular hypothesis misses the contrastive nature of evidential support (LL) codifies. (LL) only tells us which of two competing hypotheses some observation favors; by itself, it is insufficient to show that an observation *raises* or *lowers* the probability of a particular hypothesis.

(LL) holds another advantage for survivalists. It may resolve the ambivalence of survivalists who are reluctant to say that the survival hypothesis predicts the data, but who still maintain that the hypothesis *accounts for*, *fits*, or *leads us to expect* the data (Gauld, 1982, pp. 73, 77, 110, 138–139; Lund, 2009, pp. 101–103, 152; cf. Hodgson, 1898, pp. 361–367). Of course, survivalists who adopt (LL) should emphasize the contrastive nature of the expectedness. The survival hypothesis does not lead us to expect the data full-stop; rather, it leads us to expect the data *more than* some competing (non-exhaustive) hypothesis.

I think this is the best response a survivalist can pull together in the landscape of well-established, widely deployed criteria of evidential support. Unfortunately for the survivalist, it is a hollow victory.

First, adopting (LL) means that survivalists will have

to soften what they claim on behalf of the survival hypothesis. They will not be able to make non-contrastive claims about the favorable plausibility or probability of the survival hypothesis, nor that they have proved the survival hypothesis by a preponderance of the evidence (i.e., that survival is more probable than not), much less beyond reasonable doubt (i.e., highly probable). They will only be able to say that some observation(s) favor the survival hypothesis over some but not all alternative hypotheses. Finally, (LL) does not tell us what we should believe, other than the belief that some observation favors the survival hypothesis over some competing hypothesis.

Second, while there may be some observations that favor the survival hypothesis over the competitors taken individually, there will also be other observations that favor conventional alternative hypotheses. For example:

$\Pr(\text{Mrs. Piper's G.P. errors} \mid \text{cold reading}) > \Pr(\text{Mrs. Piper's G.P. errors} \mid \text{George Pellew is the communicator})$

$\Pr(\text{Mrs. Piper's G.P. lacking the philosophical and classical knowledge characteristic of Pellew} \mid \text{cold reading}) > \Pr(\text{Mrs. Piper's G.P. lacking the philosophical and classical knowledge characteristic of Pellew} \mid \text{George Pellew is the communicator})$

$\Pr(\text{Mrs. Piper's G.P. weaker hits} \mid \text{cold reading}) > \Pr(\text{Mrs. Piper's G.P. weaker hits} \mid \text{George Pellew is the communicator})$

For each of the above, the "cold reading" likelihood would be very high, perhaps even 1, since it is very much to be expected that, if cold reading is the source of the G.P. person's knowledge and demonstrated abilities, this would produce the cocktail of remedial truths, significant errors, and confusions Hodgson tried to rationalize. And no contentious assumptions are needed. But the survivalist, having adopted the idea that the survival hypothesis is not predicting anything, will automatically lose every round in which rival hypotheses in fairly simple forms confer probabilities of greater than $\frac{1}{2}$ on the observations. So, under (LL) some observations will (strongly) favor non-survival hypotheses over the survival hypothesis. Such observations are, in a clear sense (strongly), *unfavorable* to the survival hypothesis. This functions as a disconfirmation of the survival hypothesis, even if only relationally or contrastively.

Third, the demand for net assessment is just as appropriate under (LL) as it is under Bayesian confirmation criteria. So, Augustine can recalibrate his important point about the failure of survivalists to properly weigh disconfirming observations. This does not require that the

survival hypothesis make predictions, only that all relevant observations and their corresponding likelihoods are weighed. What must be considered are (i) the individual observations that favor survival over competing conventional hypotheses and (ii) the individual observations that favor one or more competing conventional hypotheses over the survival hypothesis. These must then be weighed so that something can be said about what the *total observations* favor. The survivalist would need to show that the total relevant observations O^* are such that for each hypothesis H_i from the set of competing alternative hypotheses $\{H_1, H_2, H_3, \dots, H_n\}$, it is true that $\Pr(O^* \mid \text{survival hypothesis}) > \Pr(O^* \mid \text{conventional hypothesis } H_i)$.⁵³

Finally, although auxiliary assumptions are needed for hypotheses to make predictions, they are also needed to apply (LL) when the contrasting likelihoods are both less than $\frac{1}{2}$. This is because the expectation of the observation, however weak, typically depends on auxiliary assumptions. I refer back to the Cuban cigar/house break-in example. We needed auxiliary assumptions about Corbin in that example, even though they did not generate a prediction about the specific item of evidence. And this brings us to a fundamental criticism. **Survival arguments, whether likelihoodist, Bayesian, or IBE, all depend on likelihood inequalities. The evidential and/or explanatory salience of likelihood inequalities is the one point of agreement between all three of these approaches. But this is the Achilles' Heel of survival arguments.** I turn to this in the final section as it relates to one of Augustine's important criticisms of the BICS essays and the reply from Braude et al.

15. The Testability Problem

Braude and his cohorts concede that parapsychological phenomena are not susceptible to ordinary empirical testing (Braude et al., 2022, p. 405). Braude has elsewhere argued that neither psi nor survival are open to the kind of falsification that characterizes scientific hypotheses, and so it is difficult to say what the evidence for survival should look like (Braude, 2003, pp. 16–20, 300). Braude et al. may be correct here, but this cannot plausibly be leveraged against Augustine's argument or even against a recalibrated, non-predictive (LL) version of his argument. Quite the contrary. If tests for survival or psi phenomena are not susceptible to ordinary empirical testing, if we cannot say with any reasonable confidence what the evidence for survival should look like, then so much the worse for the BICS essayists who assume otherwise. They, not Augustine, are the ones proposing that they have good scientific evidence for survival. It is the survivalists in Augustine's crosshairs who are forced to adopt

auxiliary assumptions which are no more than possibly true in order to shield the survival hypothesis from disconfirmation. This is why survival arguments only create the illusion of being scientific and empirically testable.

Instead of acknowledging the above, Braude et al. manage to turn their observations into a criticism of Augustine:

Lurking below the surface is an interesting and serious problem which Augustine does not consider at all – namely, whether we can ever confidently assess success or failure in *any* parapsychological test... most (or perhaps all) of the time, we have no idea what is really going on in a parapsychological experiment. (Braude et al., 2022, p. 405)

Two things are worth reiterating here. First, Augustine was addressing the testability of the survival hypothesis as this topic arises in the BICS essays in question. He was not discussing the broader category of *parapsychological tests*. Second, the interesting and serious problem Braude et al. have noted is precisely the one Augustine has diagnosed, at least with reference to proposed tests for survival. As I previously demonstrated, Augustine's argument concerning the significance of failed tests is materially conditioned by *survivalist* assumptions, not his own. The survivalists Augustine is responding to have proposed tests for survival on the assumption that we *can* assess success in such tests, whether hits in mediumship or pre-assigned targets in NDE tests. His point is that survivalists who regard apparent successes as evidence in favor of the survival hypothesis ought to take experimental failures as facts that weaken the purported inference to the survival.

Braude et al. also claim that experimental failures, whether in mediumship or near-death experiences, would only “disconfirm a particular *model* of personal survival” (Ibid., p. 405). And why is that? Because all such experimental tests – for example, the encrypted message or combination lock tests in mediumship – rely on various assumptions about what it would be like to survive death. Braude et al. appear to be relying on the assumption that the survival hypothesis has no predictive consequences or well-defined likelihoods (and so no explanatory power) unless it is bulked up with auxiliary assumptions. This is correct (Sudduth, 2016, ch. 9). This is a consequence of the Duhem-Quine thesis: we test statements in bundles (Sober, 2008, pp. 144–147). As previously noted, it is typically a hypothesis *plus auxiliary assumptions* that generates predictions or well-defined likelihoods.

But it is unclear why Braude et al. think the above

observation is an effective counterpoint to Augustine. Perhaps they think Augustine was claiming that a failed test for survival disconfirms the survival hypothesis and is therefore evidence against the hypothesis. But it should be clear from Augustine's response to this particular objection (Augustine, 2022b, p. 421) that he was not leveraging "experimental failure" and "disconfirmation" against the truth of the survival hypothesis. He was attempting to undermine the survivalist's appeal to ostensible successes as a confirmation/strong evidence for the truth of survival. To do this, he adopted, for the sake of argument, the assumptions survivalists must adopt to lay claim to ostensible successes as confirmations. He said as much in his reply (Ibid., p. 431n15). **The wider point Augustine is arguing is that these survivalists badly mishandle disconfirming or defeating evidence. Consequently, they fail to cogently reach conclusions about the net assessment of the evidence for survival. So, their strong claims about the survival hypothesis are not justified.**

Moreover, while it is true that we test statements in bundles (core hypothesis plus auxiliaries), it does not follow that failed tests for survival would *only* disconfirm a particular model of survival. In cases of apparent disconfirmation, it is hypothesis H plus auxiliary assumptions A that leads us to expect what we do not observe. *Absent further considerations*, this situation can count either against H or A, or both. All we can say is that we have disconfirmed the conjunction {H & A}, but we do not know whether the actual observation discredits or counts against H or A or both. So, we cannot say it *only* disconfirms the model (hypothesis plus auxiliaries). It *might* only disconfirm the model. But if there are independent reasons to doubt H, then this would give us a reason to view H as the culprit.

The latter point is important. Augustine's Surprise Principle argument from the neurophysiological data (see §8) provides evidence against discarnate survival. This argument is independent of his argument concerning the significance of failed survival tests. The former argument gives us reasons to suppose that the survival hypothesis is false, and the latter argument (at least) gives us reason to doubt whether the data to which survivalists appeal confirm the survival hypothesis.

This brings us to a fundamental problem baked into the entire empirical survivalist's program. It looks like the survival hypothesis is not empirically testable at all. On the one hand, it is not testable *without* auxiliary assumptions since auxiliaries are needed to generate sufficiently defined likelihoods, which are in turn necessary if any of the kinds of data in question are to confirm the survival hypothesis. On the other hand, it looks like the

survival hypothesis is not testable *with* auxiliaries because the auxiliary assumptions themselves cannot be independently justified. This is an important implication of Augustine's discussion of the significance of failed tests for survival, which I have elsewhere argued vitiates all extant empirical survival arguments (Sudduth, 2013a, 2013b, 2014, 2016).

Sober writes:

Hypothesis H_1 can now be tested against hypothesis H_2 if and only if there exist true auxiliary assumptions A and an observation statement O such that (i) $Pr(O | H_1 \& A) \neq Pr(O | H_2 \& A)$, (ii) we now are justified in believing A , and (iii) the justification we now have for believing A does not depend on believing that H_1 is true or that H_2 is true and also does not depend on believing that O is true (or that it is false). (Sober, 2008, p. 152)

Sober's account of testability reiterates the broadly contrastive nature of hypothesis testing and the need for hypotheses to be joined with auxiliary assumptions to generate likelihood inequalities. More specifically, the formulation underscores that we must be justified in believing the required assumptions and that this justification be independent of believing either the hypothesis or believing that the observation is either true or false.⁵⁴

Sober's point reinforces why Hodgson and other survivalists have been mistaken. The error is not the idea that the survival hypothesis leads us to expect the observational evidence; it is the belief that the survival hypothesis is empirically testable in a way that leads to a victory for the survivalist. **This goes right to Augustine's central criticism concerning experimental failures. It is not that survivalists refuse to acknowledge that the survival hypothesis has been disconfirmed. It is that their maneuvering reveals why its disconfirmation, given survivalist assumptions, would be as illusory as its confirmation given those same assumptions.** Unlike ordinary and extraordinary empirical hypotheses, the survival hypothesis is an untestable hypothesis. It is a metaphysical conjecture seeking a point of connection with the empirical world. Far from this not occurring to Augustine, he has laid the groundwork for rational doubt concerning whether – to quote Braude et al. – “we can ever confidently assess success or failure” when it comes to tests for survival or the paranormal. At present, we cannot. Therefore, arguments that assume otherwise are flawed. Braude et al. seem to agree.

There are some illuminating parallels between the logical flaws in survival arguments canvassed above and widely discussed criticisms of intelligent design argu-

ments (Sudduth, 2014, 2016, pp. 303–304). Sober’s observations are worth quoting at length:

The problem with the hypothesis of intelligent design is not that it makes inaccurate predictions but that it doesn’t predict much of anything. Rather, the design hypothesis merely allows our observations – whatever they turn out to be – to be folded inside a simple formula...

I have argued that the design argument is unsuccessful because we have no way to evaluate

$Pr(\text{the eye has features } F_1 \dots F_n \mid \text{the eye was made by an intelligent designer}).$

My point is not that we don’t know what the point value is of this probability but that we can’t even judge whether it is greater or less than

$Pr(\text{the eye has features } F_1 \dots F_n \mid \text{the eye was the result of a mindless random process}).$

The value of this second probability is very low, but it is not zero. As we have seen, auxiliary propositions can be invented about the putative designer’s goals and abilities that ensure that the likelihood of the intelligent-design hypothesis is very high, but it is equally true that auxiliary propositions can be invented that ensure that the likelihood of the intelligent-design hypothesis is zero. What is needed is not the invention of auxiliary propositions (whether they help or hurt the design hypothesis) but the identification of auxiliary information that is independently supported. Paley did not provide this information, and the same is true of modern defenders of the design argument. (Sober, 2008, pp. 154, 167–168)

Mutatis mutandis, Sober has concisely summed up the plight of the survival debate. The fundamental flaw in survival arguments is not that the survival hypothesis makes inaccurate predictions, but that it makes no (soft or hard) predictions at all. At least it makes no predictions until it is bulked up with auxiliary assumptions. But those assumptions, lacking any independent justification, are simply part of a just-so story that allows survivalists to accommodate any possible observation. What is needed is independent support for whatever auxiliary information survivalists wish to enlist for the purpose of laying claim to evidence for survival. Hodgson did not provide the information, and the same is true of modern defenders of the survival argument, especially as those defenders are paradigmatically represented by the winners of the BICS Contest.

If I may anticipate a possible Braude et al. styled re-

joinder, *not so fast*.

The conscientious survivalist may have picked up on something in the preceding argument that looks like it might be used as leverage against Augustine’s conclusion that the neurophysiological data strongly supports the dependence thesis over the independence thesis. If the survival hypothesis makes no soft or hard predictions at all (sans contestable auxiliaries), how can any of the neurophysiological data disconfirm it in Augustine’s sense? If the hypothesis is so predictively impotent as to not generate any likelihoods at all without supplementation with contestable auxiliaries, is not the skeptic barred from appealing to neurophysiological data as evidence against survival? In a word, *no*.

In saying that the survival hypothesis is an untestable hypothesis, I meant specifically a *robust* survival hypothesis or survival *theory* which is bulked up with untestable or non-independently justified auxiliary assumptions. Without auxiliaries, it is not possible for the kinds of data in question to confirm the survival hypothesis, nor for failed tests to disconfirm such a survival theory. If observations incrementally or absolutely *confirm* the survival hypothesis (i.e., raise its all-things-considered probability a bit, or raise it above $\frac{1}{2}$, respectively), then the hypothesis must be bulked up with a variety of suspect auxiliary assumptions. If those observations are to *favor* the survival hypothesis over a non-survival competing hypothesis, then the survival hypothesis will need to be bulked up with various suspect auxiliary assumptions. Moreover, any disconfirmation resulting from failed tests for survival would also presuppose such auxiliaries. And, as we saw with Hodgson, if the survivalist is to immunize the survival hypothesis (or theory) from disconfirmation arising from the *survivalist’s* idiosyncratic assumptions, then even more suspect assumptions are required.

However, it does not follow from any of this that such bulking up is required for any observation to count against a *simple* survival hypothesis, at least if that hypothesis *entails* the mind-brain independence thesis. As previously indicated, Augustine was careful to note in his deployment of the Surprise Principle that he was applying it to the dependence and independence theses in their vanilla forms, with as little supplementation as possible. Whichever way one bulks up the hypothesis of discarnate survival, it will always entail the persistence of consciousness in the absence of a functioning brain or some other suitable physical substrate. To the extent that there are observations much more expected given mind-brain dependence than the generic supposition of mind-brain independence, then observations *can* disconfirm the core simple hypothesis of discarnate survival.

In connection with this point, Augustine and Fishman

(2015, pp. 227–246) provide a more detailed discussion of observations that disconfirm a simple survival hypothesis. There is no need to relitigate that here. The present point is a conceptual one. What matters is the logical relationship between the description of the observation and the content of the survival hypothesis. As that stands, it looks like the hypothesis of discarnate survival can be disconfirmed without the survivalist having to say much at all, but unless the survivalist is gregarious, his hypothesis cannot be confirmed. The survivalist is thus caught between the Scylla of a straightforward empirical disconfirmation and the Charybdis of an elusive, if not illusory, confirmation.

Concluding Remarks

Augustine's central criticism of the BICS essays is that they failed to accomplish what they claimed to have accomplished. The essays failed to prove the truth of the survival hypothesis beyond a reasonable doubt or otherwise show that the alleged evidence confers any strong positive epistemic status on belief in survival. Moreover, as Augustine sees it, the considerations adduced by the BICS essayists do not even make discarnate survival more probable than not, a much lower evidential threshold than what most of the essayists claim to have shown. If the essays represent the best evidence for survival, the best is not very good at all. The essayists have failed to show that the best evidence for life after death is anything more than the best of a bad lot.

According to Augustine, the main problem is that **the survivalists in his crosshairs fail to properly weigh the total evidence. Consequently, their conclusions are unwarranted, and belief in survival (based on their alleged evidence) is not justified.** Augustine shows an alarming trend among the BICS essayists. They are supposed to represent the cream of the crop in the field of survival research, but their reasoning is logically and epistemologically defective.

- They ignore or mishandle salient facts – for example, neurophysiological data or facts concerning their own failed experimental tests – which are potential evidence against the survival hypothesis, or which would otherwise weaken the inferences they wish to draw.
- They provide very superficial analyses of rival explanations or how the space of rival explanations impacts the net assessment of evidence for the survival hypothesis – for example, they treat alternative explanations in their least plausible forms and ignore more nuanced ways facts can deceptively give the appearance of survival.

- They lack sufficient clarity about why the data, individually or jointly considered, should be regarded as evidence, good or otherwise, for the survival hypothesis, or they rely on inappropriate criteria of evidential support to justify their claims.
- They commit a large number of garden variety logical fallacies en route to their preferred conclusions.

The Braude et al. Reply

The Braude et al. reply to Augustine's criticisms is perplexing in several ways. It is not adequately calibrated to address Augustine's arguments, ignores salient common ground, neglects epistemological issues central to Augustine's critique and the survival debate, and is opaque with respect to the positive survival claim they wish to defend against Augustine's criticisms. They seem to think that there is a better case for survival than Augustine is willing to concede, but that case is not presented or even outlined anywhere in their reply. They say, "some evidence seems much stronger than what skeptics assume or conclude" (Braude et al., 2022, p. 399). *Seems to whom exactly? By virtue of what standard? Given what range of assumptions? And which skeptics?* The Braude et al. claim needs substantial unpacking before we can take it seriously as anything more than a declaration of personal credulity. Presumably, a skeptic is just as entitled to any degree of incredulity. Consequently, the sentence that Braude et al. wish to offer as a criticism of Augustine involves the same kind of vagueness and potentially question-begging insinuations that vitiate the wider field of survival literature.

In §4 and §6, I explored Braude's assessment of the evidence for survival in his previous publications. His evaluation of the evidence is modest and compatible with Augustine's conclusion that the BICS essays are unsuccessful at showing that the survival hypothesis has been proven beyond a reasonable doubt (= highly probable), as well as unsuccessful at showing that the evidence even makes survival more probable than not. In fact, Braude's assessment of the evidence for survival is compatible with *denying* that the evidence makes survival more probable than not. And we have also seen that Augustine agrees with Braude that belief in survival can be reasonable. To be sure, Braude does contend that there are some data for which the survival hypothesis apparently provides the best (or at least marginally better) explanation. But according to Braude, the best explanation is not, as it is for Augustine, the explanation with the highest posterior probability. On my reading, Braude is not a Bayesian explanationist. He does not use Bayes' theorem to bridge the gap between explanatory power and evidential sup-

port.

The area of genuine disagreement between Augustine and Braude seems more narrowly concentrated on the extent to which the better cases – Mrs. Piper’s mediumship, for example – are susceptible to non-paranormal counterexplanations. Braude thinks such cases resist being explained away by fraud, coincidence, and other usual suspects. By contrast, Augustine argues that survivalist attempts at ruling out such counterexplanations are inadequate. These efforts, paradigmatically represented in the BICS essays, involve a variety of mistakes in logic and epistemology. Among these are (i) not considering more nuanced ways counterexplanations lower the probability of the survival hypothesis or weaken the inference to survival, (ii) relying on fallacious inferences, like probabilistic modus tollens, to rule out rival hypotheses, and (iii) failing to show that the survival hypothesis makes the observational data more probable than do non-survival alternatives.

A few points are worth reiterating here. Even if naturalistic or conventional hypotheses do not provide a satisfactory explanation of some data, this is insufficient to rule out such explanations. Survivalists must do better than assert that there are some cases or specific phenomena which are not easily explained away. This is lazy testing. Hypotheses must be tested against one or more alternatives. Do not ask whether some observation is improbable given a non-survival hypothesis; rather, ask whether the survival hypothesis makes the observation *more probable* than some non-survival alternative. Therefore, ask what the survivalist must assume for some observational datum to be more expected given the survival hypothesis than it would be given the alternative hypotheses. **The case for survival depends on justified likelihood inequalities.** Ruling out counterexplanations depends on *ruling in* the survival hypothesis. The survivalist preoccupation with the former has often distracted them from accomplishing the latter. **Consequently, survivalists have failed to successfully show that there are observational data that are genuinely surprising but for the survival hypothesis.**

Braude et al. concluded their reply by saying, “Augustine has squandered an opportunity to advance the debate over survival. What’s needed are novel propositions, not the tired and transparently defective skeptical arguments on which he often relies” (Braude et al., 2022, p. 409). This assessment rests on the assumption that Braude et al. have adequately understood Augustine’s arguments. They have not. So, the latter assertion is a toothless bite on the skin of Augustine’s critique. The accusation also rests on the assumption that survivalists and their critics have the same conception of what it means to advance

the survival debate. I am not convinced this is true. As for novel propositions, Augustine provided several; Braude et al. engaged none of them. Of course, even if Augustine failed to advance the debate, he has done no worse than the best survivalists have had to offer for the past 140 years. In one crucial respect, though, he has actually done better. His critique of the Contest and its essays, as well his reply to Braude et al., has at least illuminated why the survival debate has failed to advance much during its century-long nascence.

Eight Constructive Suggestions

So much for the negative summary. Here are eight constructive suggestions for survivalists.

First, survivalists need to pay far more attention to the logical architecture of survival arguments. What are the premises and conclusion(s) of the main survival argument they wish to present? What sub-arguments are being invoked to justify potentially contentious premises in the main argument? Survivalists have a tendency to present narratives in which they stack facts and then assert their preferred survivalist conclusion, often including a perfunctory dismissal of rival hypotheses. At the remedial level, this can be addressed if survivalists would state their argument(s) using recognizable argument forms, with their premises and conclusion(s) explicitly stated and sub-arguments carefully distinguished from their main argument. Just as a pile of wood does not make a house, a heap of facts does not make an argument.

Second, survivalists need to exhibit greater care in how they represent and engage in critical assessments of their arguments. For example, it is important to distinguish between the contention that the survival hypothesis is false and the claim that survivalists have failed to provide sufficient reason to suppose that the survival hypothesis is true. These are very different kinds of claims, and the arguments offered in support of them are significantly different. The distinction between three broad types of skepticism outlined earlier provides a helpful template for mapping out salient forms of skepticism.

Third, survivalists need to do logical remediation and clean up the fallacious nature of their suggested inferences. Augustine provided an extensive catalog of logical mistakes in the BICS essays, and I have canvassed several in this paper. For example, the suggestion that non-survival hypotheses are improbable or must be rejected because they confer low probabilities on the observational data – that is, do not account for, do not lead us to expect, etc., the relevant data. Or concluding that the survival hypothesis is at least more probable than not because it is the best explanation of the data. These fre-

quently encountered inferences are simply not cogent.

Fourth, survivalists need to apply Royall's important insight and distinguish between the following two questions – What does the evidence presently say? What should we believe? Which question do survivalists propose to answer? This is important because it is possible for evidence to tell us something significant – which of two competing hypotheses do the observations favor? – without telling us which hypothesis we should believe or how strongly we should believe it.

Fifth, survivalists need to express their survivalist conclusion(s) with greater conceptual clarity. This includes being clear about the favorable evidential claim they wish to make on behalf of the survival hypothesis – for example, what they mean by evidence, how strong they think the evidence is, and what kinds of criteria they are relying on to make such judgments. And, in the case of IBE survival arguments, survivalists need to clearly state how they construe the relationship between evidential support and explanatory power as outlined in section §5.

Sixth, survivalists need to avoid relying on inappropriate criteria of evidential support. One of the more egregious examples, discussed in §1, is the reliance on legal evidentiary standards – for example, the standard of proof beyond reasonable doubt. Although there is a distinctly epistemic dimension to legal evidentiary standards, even in jurisprudence, this aspect of legal standards of proof is explicated in terms of more fundamental, non-domain-specific criteria of evidence assessment – for example, Bayesianism, likelihoodism, or bulked-up inferences to the best explanation. Otherwise stated, in their epistemic dimension, legal evidentiary standards are instantiations of broader theories of evidence. In this sense, “beyond reasonable doubt” is not an alternative to the kinds of criteria discussed throughout this paper; rather, in its epistemic dimension, it is grounded in such principles. If we stripped away the judicial features of legal evidentiary standards or extracted their salient epistemic elements, we would not be relying on anything distinctly *legal*. Consequently, survivalists who profess to be relying on legal standards of proof are either engaged in nonsense or relying on broader epistemic/evidential standards. The latter renders the use of legalese, legal analogies, and so forth, unnecessary and misleading.

It follows from the previous points that survivalists ought to reject the first three of the seven survivalist claims listed in §2.

- The observational data logically demonstrate the survival hypothesis.
- The observational data prove the survival hypothesis beyond a reasonable doubt.

- The observational data prove the survival hypothesis by a preponderance of the evidence.

Seventh, survivalists should retool their deployment of inference to best explanation survival arguments or refrain from using such arguments. (i) Stronger formulations of IBE survival arguments would be needed to circumvent the philosophical objections outlined in §4. (ii) There are many different explanatory virtues and so different IBE arguments, but no clear way of choosing between these rival accounts or weighting explanatory virtues. (iii) As a special case of the former, there is no probability cash value in explanatory merit unless IBE is merged with Bayesian probability. (iv) There are good reasons for thinking that explanatoriness is evidentially irrelevant (Roche & Sober, 2013). (v) For reasons noted in §4, traditional survival IBE arguments are self-defeating.

It follows from the seventh point that, unless survivalists are prepared to substantially retool IBE survival arguments – for example, by merging such arguments with Bayesian probability – they ought also to reject the following claim:

- The survival hypothesis is the best explanation of the observational data.

This leaves us with only three kinds of generic claims that ought to be the focus of inquiry into whether there are facts that provide evidential support for the survival hypothesis, and assuming there are such facts, in what way and to what degree the facts evidentially support the survival hypothesis:

- *The observational data favor the survival hypothesis over alternative hypotheses.*
- *The observational data are evidence that the survival hypothesis is true.*
- *The observational data show that the survival hypothesis is probably true.*

Finally, survivalists need to adopt and deploy epistemic principles and evidential criteria that are relevant to or would be required to justify the three claims above, and they need to correctly deploy such criteria. As I argued in §5, the law of likelihood is sufficient as a framework for justifying the first and second claims above, though without saying anything about the plausibility or posterior probability of the survival hypothesis or what we should be believing regarding its truth. By contrast, Bayesian incremental confirmation provides an alternative framework for justifying the second claim,

and in a way that also tells us something about belief in survival, namely that we should increase our confidence in that hypothesis. And, it is Bayesian reasoning, specifically Bayes' theorem, that provides a framework for justifying the third claim above, where this implies a net assessment of the survival hypothesis being at least more probable than not given the evidence.⁵⁵ This also addresses Royall's belief question.

One of the prominent themes in this paper has been that evidence should be understood *probabilistically*, either the probability of a hypothesis given the evidence (Roush, 2005, pp. 154–178) or contrasting probabilities of the observations given two competing hypotheses (Sober, 2019, pp. 32–41). This is no place for a full-blown defense of these probabilistic views of evidence which Bayesian and likelihoodist views formally codify, nor for the Surprise Principle which informally expresses the widespread intuition that likelihood inequalities are evidentially significant and essential to hypothesis testing and inference to the best explanation. Given the fundamental nature of Bayesian and likelihoodist views of evidential support, it is hardly surprising to see them applied across multiple areas of inquiry, including philosophy of religion, psychology, sociology, and jurisprudence.⁵⁶ It is only recalcitrant survivalists who wish to insulate the survival hypothesis from probabilistic reasoning and its epistemic guardrails. Survivalists who do not care for established theories of evidence as the scaffolding of survival arguments are free to propose and defend their own. What is not an option is, as Braude has rightly called it, "more sloppy reasoning about survival" (Braude, 2021a).

Of course, there is no guarantee that survival arguments developed along the lines I have proposed will be successful. I, for one, am skeptical of such an outcome. But even in the worst-case scenario, survivalists at least have an opportunity to produce the "novel proposals" to which Braude et al. refer in their final words. Perhaps lucidity also. Even if this does not warrant a reassuring confidence in the reality of survival, it at least encourages optimism that survivalists are capable of advancing the debate in a sensible and perhaps rigorous way. In the words of Stephen Braude, "Confidence will have to come later, if it comes at all."⁵⁷

ENDNOTES

1. Imants Barušs, Arnaud Delorme, Dean Radin, and Helané Wahbeh.
2. Augustine subsequently published (Augustine, 2022c) a response to Michael Nahm's reply to Augustine's BICS critique (Nahm, 2022). He also published an essay (Augustine, 2023) in which he shows "striking similarities"

between the arguments of survival researchers and the fallacious reasoning of fundamentalist Christian apologists.

3. Bayesianism and likelihoodism are the two dominant approaches to confirmation (Chalmers, 2013; Curd, Cover, & Pincock, 2013; Fitelson, 2007, 2011; Hawthorne, 2011, 2018; Lin, 2023; McGrew, T., 2000; Sober, 2008, pp. 1–108; Swinburne, 1973). Each makes use of probability to provide qualitative and quantitative criteria for reasoning about evidential support. For detailed applications of confirmation theory to the survival debate, see Augustine and Fishman (2015) and Sudduth (2016). I discuss Bayesianism and likelihoodism in the present paper beginning in §5.
4. For example, Braude et al. (2022, pp. 401–402) objected to Augustine's criticisms of the survivalist reliance on testimony, specifically his use of Loftus's work. But Augustine's argument here was directed at Michael Nahm's reliance on testimony and other legal concepts for proving survival beyond a reasonable doubt. The issue is not the general reliability of testimony. It is the reliability of testimony in the context of legal rules and evidentiary standards (Augustine, 2022a, p. 368). Augustine only said of Loftus that she provides "all sorts of reasons to hesitate to rely upon it [testimony] so heavily (as survival research typically does)" (Ibid., p. 368). His brief reference to Loftus is only one of several considerations designed to undercut the degree to which survivalists rely on testimony and its independent adequacy to justify the attribution of strong positive epistemic status to the survival hypothesis. Our ordinary reliance on testimony may provide a *prima facie* justification for testimonial beliefs, but this kind of justification is defeasible and would not be sufficient to ground extravagant epistemic claims. Augustine also quoted Braude's coauthors to support his position. Braude et al. ignored how Augustine framed his points on testimony, and nothing they said about the general reliability of testimony (and memory) rescues it from the grip of the specific problems that arise in the legal context Nahm adopted for his survival argument.
5. Braude tends to invoke the skeptic's alleged reliance on various metaphysical assumptions. But survivalists are hoist by their own petard. They depend on an enormous amount of unsupported and untestable assumptions – for example, assumptions about the nature and capacities of postmortem consciousness. Also, Braude's frequent redirects to issues in the philosophy of mind are not responsive to Augustine's lengthy and novel argument, which shows why no position in the philosophy of mind inoculates survivalist arguments

from the kind of criticisms Augustine has offered (Augustine, 2022a, pp. 384–388).

6. The term “probability” is used in different ways. **Inductive probability** refers to the degree to which the premises of an argument provide (non-conclusive) evidential support for the argument’s conclusion. **Epistemic probability** refers to the degree to which a statement or belief is supported or made plausible by some other statement(s) for a particular person at a particular time. Epistemic probability can be viewed as parasitic on inductive probability. “The *epistemic probability* of a statement is the inductive probability of that argument which has the statement in question as its conclusion and whose premises contain all of our relevant factual knowledge” (Skyrms, 1966, p. 15). As Skyrms notes, the inductive probability of an argument is not person- or time-relative, whereas the epistemic probability of a statement is since it depends on “the stock of relevant knowledge possessed by a person at a given time” (Ibid., p. 18). On epistemic probability, also see Swinburne (1973, pp. 1–10), and (2001, pp. 56–73). Epistemic (and inductive) probability should be distinguished from **factual probability** (including “physical” and “statistical” probability), which is a function of objective features of the physical world (e.g., its laws and structure). For example, the factual probability of drawing a black ball from a sealed box containing nine black balls and one white ball is .9 (almost certain), whereas its epistemic probability will vary depending on the evidence one has about the color and number of the balls in the box. In this paper, I am primarily concerned with inductive and epistemic probability.
7. “Well supported” here means that the evidence, codified in an argument, makes the survival hypothesis at least more probable than not (see notes no. 6, 8, and 9). If Augustine’s basic argument is sound (valid with true premises), then it will be sound *a fortiori* for arguments that purport to show that the survival hypothesis is highly probable, beyond reasonable doubt, etc.
8. As indicated in §1, “beyond reasonable doubt” and “preponderance of the evidence” are *legal* evidentiary standards and inappropriate as evidential criteria in the survival debate. I include them here because survivalists make such claims. What is relevant, of course, is the epistemic *dimension* to such standards. This involves the calibration and application of non-domain-specific criteria of reasoning and evidential support – for example, Bayesian reasoning. The epistemic or probative dimension to “preponderance of the evidence” is often expressed probabilistically as a(n) (inductive or epistemic) probability above the threshold value of 0.5 or $\frac{1}{2}$ – that is, the evidence should make the hypothesis at least *more probable than not*. When expressed probabilistically, “beyond reasonable doubt” requires surpassing a threshold value typically assumed to be above 0.9 – that is, the evidence should make the hypothesis *highly probable*.
9. I take “probably” in (4) in the broad sense, such that the survival hypothesis is *at least* more probable than not given the relevant observational evidence. Where H = the hypothesis and O = observational evidence, $\Pr(H | O) > \frac{1}{2}$ formally expresses this idea. I list (3) and (4) as distinct claims. Survivalists sometimes assert (3) but refuse to parse it in terms of probability. Also, some survivalists assert (4) but do not parse it using the legal evidentiary standard in (3). Finally, “probably” in (4) includes probabilities much greater than $\frac{1}{2}$.
10. By *evidence* here, I mean evidence in the non-stipulative sense. It is common to refer to data, facts, observations, information, etc., as evidence regardless of whether the former *actually* supports a claim. This stipulative use of the term *evidence* is common in jurisprudence to refer to information that can be used to support claims in the legal context. In the philosophy of science, *evidence* is used to refer to observational data in contrast to the hypotheses that are adduced to explain them, especially when *evidence* is parsed probabilistically. For example, $\Pr(\text{hypothesis} | \text{evidence})$ or $\Pr(H | E)$ is a way of referring to the probability of the hypothesis given the relevant observational data. I use the term *evidence* in the stipulative sense in places where convention dictates it, but it should be clear that the central question is whether the data, facts, and information adduced on behalf of survival actually make the survival hypothesis *evident* to some significant degree, that is, whether the facts *are* evidence for survival, and if so, how strong the evidence is.
11. Survivalists who make this claim usually contrast the survival hypothesis with one or more specific competing hypotheses – for example, usual suspects such as fraud, malobservation, cryptomnesia, and more exotic hypotheses such as living-agent psychic functioning. However, it is important to distinguish between observations that favor the survival hypothesis over (i) a *single* alternative hypothesis, (ii) *more than one* alternative hypothesis, and (iii) *all* alternative hypotheses. These distinctions play out in different ways depending on one’s theory and criteria of evidence. Bayesian analyses, for example, require considering (iii). This is because, according to Bayes’ theorem, the overall probability of a hypothesis H depends on the prior probability of H’s negation – $\Pr(\sim H)$ – which is the probability of the disjunction of all logically possi-

- ble alternatives to H , and the extent to which the evidence is to be expected given all alternative hypotheses – $\Pr(O \mid \sim H)$. $\Pr(\sim H)$ is often referred to as a catchall prior, and $\Pr(O \mid \sim H)$ as a catchall likelihood. As I have argued elsewhere (Sudduth, 2016, pp. 289–300), the catchall probabilities can be high, even if the probabilities for each of the alternative hypotheses subsumed under the catchalls are low when considered individually. See §5 for a discussion on Bayesianism.
12. Rationality is a Janus-faced positive epistemic status. It can mean being within one's intellectual rights in believing a proposition (deontological rationality) or forming/holding a belief that is the product of properly functioning cognitive faculties (proper function rationality). It can also refer to any species of subjective rationality – for example, believing a proposition because it seems to be true and one knows of no overriding evidence to the contrary, or it can mean updating one's credence consistent with Bayes' theorem (Bayesian rationality). None of these statuses implies the strong claims made in the BICS essays about the probative value of the evidence.
 13. I am treating IBE arguments as a way to *justify* the truth of a hypothesis – that is, an argument form in which the truth of a hypothesis H is inferred from the fact that H provides the best explanation of some data. In this case, H 's explaining the data in question provides evidence (to some degree) that H is true (Harman, 1965; Lipton, 2004, 2007; McCain & Poston, 2024). It is important to distinguish this commonly deployed *epistemic* version of IBE from the *heuristic* version of IBE where explanatory considerations guide inquiry and lead to the discovery or generation of hypotheses (Iranzo, 2007). The term *abduction* has often been used for both heuristic and epistemic IBEs.
 14. To justify premise (3), survivalists adduce reasons to rule out more recalcitrant alternative explanations. These reasons concern the alleged dependence of such explanations on assumptions that are ad hoc, lacking independent support, or which suffer from some other kind of epistemic defect. But the survival hypothesis is no less dependent on assumptions characterized by the same kind of epistemic defects, if it is to lead us to expect any data. The survival hypothesis explains nothing unless we bulk it up with a variety of untestable auxiliary assumptions (the Duhem-Quine thesis). But if epistemically defective assumptions justify ruling out counterexplanations, they also justify ruling out the survival hypothesis itself. So, the (traditional) justification for (3) defeats the justification for (2). IBE survival arguments are hoisted by their own explanatory petard. See Sudduth (2016, pp. 214–245, 258–270, 286–307).
 15. For different views on the appropriate threshold here, see Achinstein (2001) and Roush (2005). Roush distinguishes between *some evidence* and *good evidence* (Roush, 2005, p. 158). When $\Pr(H \mid O) > \frac{1}{2}$, O is *some evidence* for H , and when $\Pr(H \mid O) = \text{high}$, O is *good evidence* for H .
 16. For discussions on different theories of evidence, including those discussed in the present paper, see Achinstein (2001), Fitelson (2011), Hawthorne (2018), Roush (2005), Sober (2002, 2008).
 17. "Law of likelihood: The observations O favor hypothesis H_1 over hypothesis H_2 if and only if $\Pr(O \mid H_1) > \Pr(O \mid H_2)$. And the degree to which O favors H_1 over H_2 is given by the likelihood ratio $\Pr(O \mid H_1)/\Pr(O \mid H_2)$ " (Sober, 2008, p. 32).
 18. Typically, it is a hypothesis plus auxiliary assumptions that confers a probability on an observation (Sober, 2008, pp. 141–154). This is often referred to as the Duhem-Quine thesis (Gillies, 1993, pp. 98–116). Roughly, the idea is that statements must be tested in bundles. I assume this throughout, though in the interest of presentational simplicity, I avoid the more cumbersome formalisms $\Pr(O \mid H \& A)$ – "A" for auxiliaries – or $\Pr(O \mid H \& K)$ – "K" for background knowledge. I discuss the significance of auxiliary assumptions in the latter part of the paper (§8, §11, §13, §14, and §15).
 19. "The likelihoodist concept of favoring describes what the evidence says about the competition between any two hypotheses that both probabilify the data at hand. The Bayesian concept of confirmation addresses a special case; it describes what the evidence says about the competition between a hypothesis and its own negation" (Sober, 2008, pp. 34–45).
 20. The Bayesian replaces the dichotomous concept belief – one believes p or does not believe p – with the idea that one has different degrees of belief. This results in a more fine-grained interpretation of Royall's belief question. The question is not about what we should believe or not believe full stop, but the level of confidence we should have based on the evidence and whether we ought to increase or decrease our degree of confidence (or do neither) given new evidence.
 21. For an account of Bayes' theorem and Bayesian epistemology, see Chalmers (2013), Hawthorne (2011, 2018), Howson and Urbach (2006), Lin (2023), McGrew, T. (2000), Sober (2002, 2008, pp. 8–32), Swinburne (1973, 2002).
 22. In Anglo-American philosophy of religion Bayes' theorem has been used to parse explanatory arguments for the existence of God. See Dawes (2009), McGrew, L. (2004), Oppy (2006), Sobel (2004), and Swinburne

(2004).

23. Matlock writes: “Augustine and Fishman (2015) maintain that the materialist position has so much going for it that it should be given the presumption of truth. They introduce a Bayesian analysis in which they assign much more weight to the brain/identity thesis than to the possibility of mind/brain interaction. The outcome of a Bayesian analysis is heavily dependent on how one weights the factors that go into it. By assigning the weights as they do, Augustine and Fishman ensure that the mind/brain identity thesis emerges the winner. However, the mere fact that there are serious questions about the mind/brain identity thesis reduces the weight that may in fairness be allotted to it, and if all the evidence in favor of mind/ brain interaction is taken into account as well, the outcome of the Bayesian analysis looks very different (Matlock 2016b, 2016c). Sudduth (2016) undertakes a similar Bayesian analysis that fails for the same reason (Matlock 2016a)” (Matlock, 2019, p. 246). Matlock here repeats his misrepresentation of Augustine and Fishman, as well as Sudduth (2016), despite Augustine correcting him three years earlier (Augustine, 2016, pp. 216–218).
24. Kelly writes: “Survival-deniers Martin and Augustine (2015) make that negligible prior probability a cornerstone of their own quasi-Bayesian approach to the survival question, devoting a large part of their book simply to repetition of the familiar standard arguments supporting the prevailing physicalist account of brain/mind relations. (Schiller [1927] clearly anticipates this strategy, by the way, and more generally the deliberate use of low priors as a means of preventing accumulation of evidence favoring any opinion one happens not to like)” (Kelly, 2016, p. 593). Kelly is incorrect about Schiller, whom he carelessly references in support of his uninformed and misguided polemic against Bayesianism. In the referenced article, Schiller offered criticisms of *a priori* prejudices that would, in principle, prevent the accumulation of evidence in support of the survival hypothesis (Schiller, 1927, p. 218). Among the prejudices he notes is the (now long outdated) skeptical demand that there be a conclusive proof of survival. On that view, it is easy to dismiss any ostensible evidence for survival on the grounds of inconclusiveness. On Schiller’s view, (i) the evidence for survival is cumulative and involves a growing probability, and (ii) inconclusive cases should be permitted to acquire collective weight (Ibid., p. 219). Other than referring to the Baconian inductive method, Schiller does not provide any details as to how such a cumulative argument for survival can be made, what it would actually look like, or whether it would actually be suc-

cessful. Nor does Kelly. But Bayesianism is the most prominent and well-justified framework for making such a cumulative argument. And nothing Schiller says is evidence against the use of Bayes’ theorem for arriving at conclusions about the posterior probability of the survival hypothesis. More to the point, neither I nor Augustine demand a conclusive proof for any hypothesis, and we have said nothing that would prevent the accumulation of evidence favoring survival. All our arguments have consistently assumed Schiller’s (i) and (ii). But unlike Schiller and Kelly, we have actually shown our work.

25. It is particularly disappointing that Matlock raises the rigging-of-the-priors objection in his review of Augustine’s book, and Kelly does so in his review of my book (see note no. 24). Augustine and I each explain in detail why the rigging objection would be untrue even if we assigned a low prior to the survival hypothesis. Neither Matlock nor Kelly seems aware of how cumulative case reasoning works when constrained by Bayesian updating, despite the fact that Augustine and I discuss this in the very books Matlock and Kelly were reviewing.
26. To illustrate, take the first scenario, where the initial prior probability = 0.10.

Observation	Pr(H)	Pr(O H)	Pr(O ~H)	Pr(H O)
1	0.10	0.80	0.40	0.1818
2	0.1818	0.80	0.40	0.3077
3	0.3077	0.80	0.40	0.4705
4	0.4705	0.80	0.40	0.6399

The chart is a streamlined illustration (based on Bayes’ theorem) of how an initial prior probability of 0.10 is successively updated with four independent observational data, each of which has a likelihood ratio of 2. Notice that the specific values assigned to Pr(O | H) and Pr(O | ~H) – I chose 0.80 and 0.40 – do not matter, only that the ratio equals 2. The values could have been 0.60 and 0.30 or 0.40 and 0.20. The posterior probability, after the first observation, is 0.1818. This posterior probability becomes the new prior probability, which has increased from 0.10 to 0.1818. The process gets repeated iteratively three more times, resulting in H’s final posterior probability = 0.6399 (more probable than not). If survivalists would like to “do the math” and explore probabilistic outcomes with adjustments in the values of priors and likelihoods, they can use a Bayesian calculator. Many online calculators are available: <https://bayesian-calculator.greenleafimaging.com> OR <https://www.richardcarrier.info/bayescalculator.html>.



- ^{27.} In another sense, these frequentist methodologies are worse than subjective. They are *epistemically irrelevant*. They are not informative about evidential support or the epistemic status of propositions. Answering the question “*how should we act?*” is a matter of prudential decision-making in which we act as if a hypothesis were true or false. This is not the same thing as acquiring evidence that a hypothesis is true or false. Neyman and Pearson admit as much, indicating that a significance test “tells us nothing as to whether in a particular case *h* is true” (Neyman & Pearson, 1933, p. 142).
- ^{28.} There are additional arguments that could be offered. Roush (2005, pp. 166–167) argues that $\Pr(O)$, $\Pr(O | H)$, and $\Pr(O | \sim H)$ are sufficient to determine the posterior probability of a hypothesis. Roush maintains that $\Pr(H)$ and $\Pr(\sim H)$ are better treated as weights, and that we can solve for their values on the basis $\Pr(O)$ and the likelihood ratio $\Pr(O | H)/\Pr(O | \sim H)$. She further shows how under particular circumstances we can determine $\Pr(O)$ without having first determined $\Pr(H)$ and $\Pr(\sim H)$. If Roush is correct, we have another reason to dismiss survivalist complaints about prior probability.
- ^{29.} This is consistent with Braude’s endorsement of the *cumulative* force of the total evidence (Braude, 2003, p. 301; 2021b, p. 19). I have explored Bayesian cumulative case survival arguments (Sudduth, 2016, pp. 202–213, 297–299), mainly because survivalists have often construed the case for survival as a cumulative case argument, and they have been doing so for over a century. See Schiller (1927) and note no. 24. But it is possible to develop a cumulative case argument for survival within the likelihoodist framework. Likelihoodism not only tells us when *O* favors H_1 over H_2 , but also the *degree* to which *O* favors H_1 over H_2 , which is given by the likelihood ratio $\Pr(O | H_1)/\Pr(O | H_2)$. This allows independent pieces of evidence to strengthen or weaken the degree to which accumulating evidence favors H_1 over H_2 . For any set of independent pieces of evidence $\{O_1, O_2, O_3, \dots, O_n\}$ and contrasting hypothesis H_1 and H_2 , the likelihood ratios can be multiplied to determine the degree to which the total evidence favors H_1 over H_2 . This does not tell us what the probability of the survival hypothesis is, but only the degree to which the total evidence favors the survival hypothesis over a rival hypothesis.
- ^{30.} Braude makes appeals to parsimony (Braude, 2003, pp. 86–95, 216–222; Braude, 2021b, pp. 25–29), but I do not see what sort of *epistemic* work it is supposed to be doing. For example, it is not informing the prior probability of the survival hypothesis as a Bayesian might say. The survival hypothesis (conjoined with various assumptions about the causal nexus and crippling complexity) entails a model that is allegedly simpler than the model implied by the living-agent psi hypothesis, but his main conclusion is that **the observations are more likely given the simpler model than the alternative**. For example, “(8) *Therefore*, the more potentially wide-ranging and virtuosic we take psi to be, the less likely it becomes that a person’s psi could produce an extended and accurate trance persona, or provide all the detailed, intimate information found in the most astonishing survival cases—and even more so, to do these things consistently” (Ibid., 2021b, p. 27). The relevant observational evidence is the “extended and accurate trance persona” which provides “all the detailed, intimate information found in the most astonishing survival cases.” Braude is concluding that these features of mediumship are less to be expected given the living-agent psi than they are given the survival hypothesis. His conclusion implies a likelihood inequality. (LL) tells us that in this situation, the survival hypothesis enjoys contrastive evidential support in relation to the alternative. Also, simplicity is typically invoked as a criterion of choice when competing theories equally predict the data, but that is not the case here. Braude also relies heavily on explanatory reasoning. Although likelihood inequalities play a significant role in Braude’s explanatory reasoning, he also refers to an array of ostensible explanatory virtues such as “empirical adequacy, explanatory simplicity, and conceptual cost” (Braude, 2003, p. 220). But it is not clear how these are functioning in his arguments.
- ^{31.} I do not know what Braude means by a “reasonable basis” for belief in survival. I agree that the evidence is such that a person who adopted various assumptions could, upon considering the various strands of evidence, repeatedly update his beliefs in accordance with Bayes’ theorem and eventually end up assigning the survival hypothesis a subjective probability (much) greater than $\frac{1}{2}$ (Bayesian rationality). Alternatively, some survivalists could be within their intellectual rights in believing in survival after considering the evidence (deontological rationality) or not be cognitively askew (proper function rationality). But we could say the same thing about the evidence that God exists, that Jesus Christ rose from the dead, that the universe is a computer simulation, that Oumuamua is an artifact from an alien spacecraft or, to insert a more mundane example, that Arthur Lee Allen was the Zodiac killer. There is evidence that provides a reasonable basis for all these beliefs, but not in any robust or

truth-conducive sense of evidential justification.

- ^{32.} In the philosophy of religion, it is common to see a distinction between (hard) atheists who deny that God exists and (soft) atheists who neither believe that God exists nor believe that God does not exist. This is parallel to the distinction between D-skepticism and W-skepticism. In each case, the latter may also be described as a form of agnosticism about the hypothesis.
- ^{33.} I understand this broadly so that it includes *doubting* or *denying* that an argument shows that survival is the best explanation of the data, survival is probable, or some set of facts is evidence for survival.
- ^{34.} The extreme interpretation of Augustine occurs elsewhere in the Braude et al. reply. “Augustine seems to infer not simply that nothing psychic could be happening during the tests for OBEs and NDEs, but more likely, given his broad skepticism about things paranormal, that nothing psychic *could occur*” (Braude et al., 2022, p. 404). This is unwarranted, both as an interpretation of Augustine’s arguments and as a way of characterizing skepticism in general.
- ^{35.} “Counterevidence” here does not mean evidence that survival is impossible, nor does the counterevidence logically entail that survival is false, nor is Augustine leveraging this particular counterevidence as sufficient to prove that the survival hypothesis is highly improbable.
- ^{36.} As Augustine rightly notes (2022a, p. 374), the Surprise Principle is typically baked into accounts of explanatory power. In Sudduth (2016) I argued that this is because survivalists think explanatory merit requires that the survival hypothesis S leads us to expect the observation O more than rival hypotheses (R_1, \dots, R_n) do. Regardless of how strict or loose survivalists regard such expectations, they are nonetheless committed to the explanatory salience of likelihood inequalities, either between the survival hypothesis and some specific rival hypothesis – $\Pr(O | S) > \Pr(O | R_i)$ – or between the survival hypothesis and its negation – $\Pr(O | S) / \Pr(O | \sim S)$, where the catchall $\sim S$ refers to all logically possible alternative hypotheses. This understanding of explanatory power in connection with survival arguments goes back at least as far as C.D. Broad (1925/1960, ch.12).
- ^{37.} In the interest of presentational simplicity, the likelihoods are formulated with the scientific facts treated collectively as F , but the ten scientific facts Augustine lists can also be treated individually in a cumulative case argument. There are potential advantages to this alternate formulation, especially if the argument is expanded into a full Bayesian cumulative case argument including initial prior probabilities and successive updating. See below in main text.
- ^{38.} Augustine’s support for premises (1) and (2) does not depend *solely* on the mail bin analogy. For example, the reasons he offers to believe that “brain development is the engine pulling the train” (Augustine, 2022a, p. 372) explain why the first three facts in the bullet point list support (1) and (2). His response to Ducasse on the proportional correlation between brain activity and mental complexity supports the fourth and fifth item in the list. And he presents further support with a passage from Henry Stapp (Ibid., p. 373) and a “disrupted hardware” analogy (Ibid., pp. 390–391n6). Thanks to Augustine for pointing this out to me.
- ^{39.} If 0.5 is the threshold for expectedness/prediction, then the formal rendering of premises (1) and (2) would be $\Pr(F | D) > 0.5$ and $\Pr(F | \sim D) < 0.5$. Therefore, the likelihood ratio – $\Pr(F | D) / \Pr(F | \sim D)$ – is greater than 1. But whenever the prior of a hypothesis is 0.5, and the likelihood ratio is greater than 1, the posterior probability of the hypothesis will be greater than 0.5 – it will be more probable than not. So, if we rely on the principle of indifference and assign $\Pr(D) = 0.5$, then given premises (1) and (2), it follows that $\Pr(D | F) > 0.5$ – more probable than not. We can get to the same conclusion even if we initially assign the independence thesis a higher prior probability than the dependence thesis. For example, if $\Pr(\sim D) = 0.6$ (probable) and $\Pr(D) = 0.4$ (improbable), but we specify that the likelihood ratio = 2 (the evidence is twice as expected given D than given $\sim D$), it follows that $\Pr(D | F) > 0.5$. If $\Pr(\sim D) = 0.7$ (probable) and $\Pr(D) = 0.3$ (improbable) and the likelihood ratio = 3, it also follows that $\Pr(D | F) > 0.5$. Likelihoods, not priors, do the heavy evidential lifting.
- ^{40.} An argument is a good one just if the premises and inferential connection between the premises and conclusion are appropriately credentialized. This means the premises should be rationally acceptable (or have some other positive epistemic status) and strongly relevant to the conclusion. Given that what makes for a good argument has these narrow parameters, there are a limited number of ways to critically respond to an argument. One can challenge the rational acceptability of the premises or the strength of the inferential connection between the premises and the conclusion. One can also show that there is some rationally acceptable proposition which would weaken the inferential connection if we added it to the arguer’s set of premises. However, merely adducing reasons to deny the conclusion of the arguer’s argument is not a proper dialectical maneuver. One would also have to show that one’s reasons to deny the arguer’s conclusion

- outweigh the reasons the arguer appealed to in support of it.
- ^{41.} Even Augustine acknowledges that they seem to have missed what is plausibly required of him given what he intends to argue (Augustine, 2022b, pp. 413–415).
- ^{42.} Hornell Hart says, “Some mediums have received honestly information which they *could not* have obtained normally, and which *cannot* be explained as due to lucky chance” (1959, p. 73, emphasis mine).
- ^{43.} Hart is an egregious offender in this regard. First, his analogies are atrociously implausible. “The existence of counterfeit money certainly does not *disprove* the existence of genuine money” (Hart, 1959, p. 52) and “If we follow the logic of the anti-survivalists we should deduce from this case of a pseudo doctor that all doctors are frauds” (Ibid., p. 255). Unlike survival, there is no antecedent dispute about whether actual money or actual doctors exist, nor is there any antecedent dispute about what counts as evidence for their existence. Second, the sources Hart cites to illustrate the “anti-survivalist” view that *all mediums are frauds* do not actually support the attribution. For example, Hart quotes Joseph Rinn: “I must take the position that no evidence exists tending to prove survival or spirit communication. . . . During my investigations I never found anything but fraud and never met even one person with supernormal or supernatural power” (Ibid., p. 52). Hart takes this as support for his claim that some investigators say that “psychic claims are ALL fraudulent” (Ibid., p. 52). The quote does not support such a conclusion, which Hart fallaciously drew from it. It does, however, support the more modest view that Rinn has no good reason to accept the claims of any medium. A stronger conclusion – there are no genuine mediums – would be warranted if there were good reason to suppose that (i) if genuine mediumship exists, then an adequate investigation should have produced conspicuous evidence of it, (ii) adequate investigations have been conducted, and (iii) none of the investigations have discovered conspicuous evidence for genuine mediumship.
- ^{44.} Braude et al. refer to the evidence for a properly conducted investigation or experiment, but I should think there is considerable dispute about what such a thing would actually look like, especially if “we have no idea what is really going on in a parapsychological experiment” (Braude et al., YR p. 405). Also, why suppose that a properly conducted experiment or investigation would sufficiently ferret out fraud?
- ^{45.} I may have no positive evidence that a particular used car salesman is going to swindle me, but his doing so is not a mere (logical or epistemic) possibility. Our background knowledge influences our initial degree of credence in particular situations. The same holds for mediumship. And, it is even more perspicuous in cases where we know that a particular medium has previously engaged in fraud, fishing, or other nefarious behavior, such as was the case with Mrs. Piper’s Phinuit control. While fraud *can* co-exist with genuine abilities, this is evidentially irrelevant to the kinds of probabilistic assessments involved in Augustine’s arguments. Even a shady used car salesman *can* make a fair offer on occasion despite a track-record of swindling customers. The problem is that knowing the latter gives one a defeater for believing the former.
- ^{46.} Consider the James Leininger reincarnation case (Leininger, 2021), relatively recent compared to Mrs. Piper’s sittings. The Leininger case is considerably less impressive once we include facts only disclosed many years after researchers had repeatedly applied their extensive skills to the case – for example, the video James watched contained imagery of a plane being shot down, the flight museum he visited on at least two occasions displayed images containing World War II information baked into James’s early veridical statements, and other allegedly unique claims attributed to James are found on other videos the boy watched. In addition to a hornet’s nest of logical fallacies, the case illustrates how dark data amplify what is otherwise a simulation of evidence for survival. See Sudduth (2021b, 2022a, 2022b).
- ^{47.} Nor will it do to say we have isolated ostensibly genuine phenomena merely because no chicanery was detected, though the same methods detected fraud in other instances. We *might* draw that conclusion. We might also conclude that the methods for detecting fraud are not always properly calibrated to detect more subtle forms of deception. We are at the mercy of the limits of the investigator/researcher’s imagination, which has on various occasions proven to be less extensive than the cunningness of tricksters. Kai Mügge’s physical mediumship illustrates this. See Braude (2014, 2016), Mulacz (2015), and Nahm (2014, 2015, 2016).
- ^{48.} Among Augustine’s considerations are mediumship being an exemplar of known fraud, DRW’s superficial treatment of the history of fraud, errors in their discussion of the Scole sittings in the 1990s, overstating the implications of researchers’ failure to detect fraud in some cases of mediumship, rationalizing instances where mediums have been caught cheating as of little relevance, and the subjective nature of assigning letter grades.
- ^{49.} Similarly, Sage considered improbable scenarios that

we should expect if Mrs. Piper acquired information through spies. For example, “If Mrs. Piper obtained the information through spies in her employment, these spies would be obliged to send her private details about all the families in the United States and Europe...” (1904/2007, p. 36).

- ^{50.} We can single out Julie Beischel here to further illustrate. In her prize-winning BICS essay on mediumship, she wrote: “For example, the threshold level of probability used by scientists to determine whether or not to reject a null hypothesis (usually $p < .05$) can be equated to the ‘standard of proof’ threshold used in a court system to determine whether or not proof beyond a reasonable doubt has been established” (Beischel, 2021, p. 60). Beischel commits three mistakes here. **First**, as noted in the text, $p < .05$ (or other p values) is an insufficient guide to evidence assessment. It cannot reasonably be used to justify the claim that there is strong evidence against the null hypothesis or for rejecting the null hypothesis. Even the Neyman-Pearson alternative on which one of Beischel’s cited sources relies is unsound when used in this way; it may be adequate for *decision procedures*, but not for assessments of *evidential weight*. As Royall emphasized, we should distinguish questions about how we should interpret observations as evidence for hypotheses and the question of what we should *do* now that we have some observations (Royall, 1997, pp. 3-4). **Second**, Beischel overgeneralizes about scientists – Bayesians or likelihoodists do not accept significance tests, and some advocates of significance tests (e.g., Fisher) and the Neyman-Pearson alternative would not accept Beischel’s suggested use of the p -value. **Third**, the suggested legal application of the p -value implies the well-known Prosecutor’s Fallacy. Some item(s) of evidence may be highly improbable ($p < .05$) given the non-guilt of the defendant. This does not justify inferring that the non-guilt of the defendant is highly improbable (= guilt is highly probable), nor does it otherwise justify the rejection of the null hypothesis (non-guilt) and so rendering a guilty verdict.
- ^{51.} An empirical hypothesis is one that can be tested against observable phenomena, but this requires a logical connection between the hypothesis and features of the observable world. Survival, if it is an empirical hypothesis, must have such a connection, even if it means nothing more than an observation is more probable under the survival hypothesis than under some alternative. Compromising this logical connection compromises the status of survival as an empirical hypothesis. If this is what it means for survival to be a part of “frontier areas of science” (Nahm, 2021, p. 59), then survival research looks like metaphysics with a scientific veneer and indistinguishable from faith-based survivalism. Religious survivalists shield their survival beliefs from empirical disconfirmation, but, unlike empirical survivalists, they do so consistently and consciously since they acknowledge the metaphysical character of their afterlife beliefs. Thanks to Keith Augustine for raising this point in response to an earlier draft of this paper.
- ^{52.} Predictive power is not the only explanatory virtue which has been leveraged in survival arguments. If it is a component of explanatory merit – it typically is – what matters is whether it is leveraged consistently (see below in main text). Moreover, as a component of explanatory power, predictive power can be downgraded to contrastive expectedness in accordance with (LL), as I suggested earlier in connection with Braude. See §13 in the main text for a discussion of this survivalist maneuver.
- ^{53.} Although this corrective should be clear from my exposition, Augustine has elsewhere made the same nuanced point. “The failure to secure replicable positive results in NDE target-identification experiments does not establish the nonexistence of any spiritual realms, but it does serve to substantially challenge positive arguments in favor of the existence of spiritual realms from NDE reports” (Augustine, 2019, p. 595). Failed experiments provide data that are undercutting defeaters, not rebutting defeaters.
- ^{54.} If the probability of Hodgson’s auxiliaries (1) and (2) were high given the simple survival hypothesis – human consciousness persists after biological death – then they might not be obviously *ad hoc*. But the conditional probability of Hodgson’s auxiliaries is not very high given the simple survival hypothesis. Hodgson’s model is only one of at least a dozen possibly true models of what consciousness would be like should it survive death (Sudduth, 2016, pp. 33-46). Absent any further evidence, $\Pr(\text{Hodgson’s auxiliaries} \mid \text{simple survival}) < .10$, which is quite low, and conservatively so. But this is a problem for the survivalist. $\Pr(H \& A)$ cannot be greater than $\Pr(A)$. From a Bayesian perspective, the survival hypothesis, even if it is assigned a very high prior probability, will have a very low prior probability when it is conjoined to improbable auxiliary assumptions. See Chalmers (2013, p. 573).
- ^{55.} When discussing confusions even the best communicators exhibit, Hodgson draws attention to how these are more prominent in initial communications from adult communicators than they are in their later communications (Hodgson, 1898, pp. 391-392). In this context, Hodgson appeals to (1) “loss of familiarity with

the conditions of using a gross material organism” and (2) “inability to govern precisely and completely the particular gross material organism which they are compelled to use” (Ibid., pp. 366–367). Hodgson’s justification for (1) and (2) depends on the justification for supposing that the communicators really are who they say they are. This is epistemically circular reasoning.

56. It is easy to see why this may not have an outcome favorable to survivalists. If the survivalist asserts *favoring without predictive likelihoods*, then for every relevant observation O_i from the set of total observations ($O_1, O_2, O_3, \dots, O_n$), $\Pr(O_i \mid \text{survival hypothesis}) \leq 0.5$. By contrast, for many observations, conventional hypotheses do strongly predict the observation. Otherwise put, supporting evidence will only weakly support survival, but counterevidence will strongly count against survival. This does not bode well for a cumulative case (LL) survival argument, but I will leave it to survivalists to, in the words of Braude, “wallow in the grubby details” (Braude et al., 2022, p. 403).
57. See Sober (2008, pp. 145, 148–154) for the supporting argument for his account of testability. I have discussed it elsewhere (Sudduth, 2016, pp. 232–234).
58. What is important here is a probative concept of probability, not subjective probability. Nonetheless, whatever subjective degree of belief a person has in the survival hypothesis, they should use Bayes’ theorem to update their degree of belief when they acquire new evidence. So, skeptics and survivalists should follow Bayesian updating with their respect to their personal beliefs about survival.
59. Confirmation theory, especially Bayesianism, is widely deployed outside the hard sciences. **Philosophy of Religion:** Chandler & Harrison, 2012; Collins, 2009; Dawes, 2009; McGrew, L., 2004; Oppy, 2006; Sobel, 2003; Swinburne, 2004. **Jurisprudence:** Aitken, Taroni, and Bozza, 2022; Bex and Walton, 2012; Dahlman, Stein, & Allen, 2021; Dahlman & Mackor, 2019; Dawid, 2002; Faigman & Baglioni Jr., 1988; Fenton, Neil, and Berger, 2016; Fienberg, 1997; Finkelstein & Fairley, 1970; Fischhoff & Beyth-Marom, 1983; Friedman, 1997a, 1997b; Gastwirth, 2020; Haack, 2014; Jellema, 2021; Kaye, 1988; Pardo & Allen, 2007; Strnad, 2007; Tillers & Green, 1988. **Psychology:** Etz & Vandekerckhove, 2018; Kruschke, 2014; Lee & Wagenmakers, 2014; Rouder, Speckman, Sun, Morey, & Iverson, 2009; Wagenmakers, Morey, & Lee, 2016. **Social Sciences:** Fairfield & Charman, 2019; Gill, 2014; Kaplan, 2014; Russo, 2020. **Sociology:** Jackman, 2009; Western & Jackman, 1994. **Political Science:** Gill, 1999; Gill, & Wasif, 2020; Jackman, 2004; Martin, 2008. **Eco-**

nomics: Koop, 2003; Koop, & Tole, 2004. **Archeology:** Buck, Cavanagh, & Litton, 1996. **Medicine and Epidemiology:** Goodman, 1999; Greenland, 2006. **Health and Nutrition:** Gleason, & Harris, 2019. **Environmental Sciences:** Annan, 2010; Lee, Zwiers, Hegerl, Zhang, & Tsao, 2005; McCarthy, 2007; O’Hagan, 2019.

60. Braude concluded his winning BICS essay by saying, “So even if the best actual evidence doesn’t warrant a reassuring confidence in the reality of survival, at the very least it encourages optimism on the matter. Confidence will have to come later, if it comes at all” (Braude, 2021b, p. 52).

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