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Probable Cause Pluralism

ABSTRACT. The constitutionality of a search or seizure typically depends upon the connection between the target of that search or seizure and some allegation of illegal behavior—a connection assessed by asking whether the search or seizure is supported by probable cause. But as central as probable cause is to the Fourth Amendment's administration, no one seems to know what it means or how it operates. Indeed, the Supreme Court insists it is "not possible" to define the term, holding instead that the probable-cause inquiry entails no more than the application of "common sense" to "the totality of the circumstances." Viewed charitably, this refusal to elaborate on the meaning of probable cause stems from an understandable desire for doctrinal flexibility in the face of weighty and competing law-enforcement demands. But the Court's doctrinal approach is also routinely criticized as an "I know it when I see it" jurisprudence that is ill equipped to safeguard civil liberties in the numerous interactions between civilians and law-enforcement actors.

This tension between doctrinal flexibility and structure is the animating dilemma of probable-cause jurisprudence—a dilemma that this Article attempts to navigate and, ultimately, to resolve. To do so, it urges a rejection of an often invoked—if not always followed—tenet of Supreme Court doctrine: probable cause unitarianism. That dominant idea, expressly endorsed in many of the Court's leading precedents, holds that whatever probable cause means, it ought to entail the same basic analytic method and be judged by the same substantive standard, from one case to another. But on close inspection, the Supreme Court's existing jurisprudence contains seeds of an alternative—and superior—conception of probable cause, which this Article terms probable cause pluralism. On this view, probable cause is an open-textured and capacious idea that can comfortably encompass distinct analytic frameworks and substantive standards, each of which can be tailored to the unique epistemological and normative challenges posed by different types of Fourth Amendment events. Probable-cause analysis can be statistically driven or intuitively assessed; it can demand compelling evidence of illegal behavior or only an occasionally satisfied profile; it can presume the credibility of some types of witnesses while treating others with deserved skepticism or disbelief. It can, in short, come to mean something—if it gives up on meaning any one thing in all cases.

In its current form, probable cause's pluralism is nascent, implicit, and undertheorized – and is thus at best a stunted and haphazard collection of disparate ideas. This Article's central contribution is to bring those ideas together, refining and synthesizing them into a comprehensive account of what a pluralist theory of probable cause could and should look like. Specifically, by organizing probable cause around three central analytic axes—which in turn ask how to assess evidentiary claims, how to assess proponents of such claims, and how to determine the certainty thresholds for those two assessments—this Article constructs a universally applicable framework for determining the constitutionality of any given search or seizure. With that framework in hand, scholars and jurists will be better equipped to reason through the many and varied cases to come and better able to assess the many cases that have come before.

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INTRODUCTION

Of the fifty-four words in the Fourth Amendment, the two that matter most are the least understood—*probable cause*. Doctrinally and conceptually, "probable cause lies at the heart of the [F]ourth [A]mendment" for one simple reason: the requirement to demonstrate probable cause—or its junior partner, reasonable suspicion—constitutes the core substantive constraint on police power in the United States. It is "the line of distinction" between legal and illegal searches and seizures. And yet, two centuries after the Supreme Court first applied the phrase, scholars continue to describe it as "elusive," "hopelessly indeterminate," and "shrouded in mystery." Courts, meanwhile, suggest it might just be the most confusing "two-word term in American law."

The challenge, to be clear, is not figuring out the basic question that probable cause poses, for on that score there is general agreement: to satisfy the Fourth Amendment's core substantive requirement, the government must point to facts

- 1. Albert W. Alschuler, Bright Line Fever and the Fourth Amendment, 45 U. PITT. L. REV. 227, 243 (1984); see also Dunaway v. New York, 442 U.S. 200, 213 (1979) (describing "[t]he central importance of the probable-cause requirement to the . . . Fourth Amendment's guarantees"). For reasons detailed infra Section III.B, this Article generally uses the phrase "probable cause" to include "the pint-sized version of probable cause required for stop-and-frisk," more commonly known as "reasonable suspicion." Anthony G. Amsterdam, Perspectives on the Fourth Amendment, 58 MINN. L. REV. 349, 414 (1974).
- 2. Carroll v. United States, 267 U.S. 132, 156 (1925). This Article focuses on the Fourth Amendment's substance and thus brackets its main procedural line of distinction: the so-called warrant requirement. Important as that procedural constraint may be, it tends to be honored in the breach. See RONALD J. ALLEN ET AL., CRIMINAL PROCEDURE: INVESTIGATIONS AND THE RIGHT TO COUNSEL 449 (3d ed. 2017); cf. infra note 231 (discussing the warrant requirement). Probable cause, however, is required whether a warrant is or is not. See U.S. Const. amend. IV ("[N]o warrants shall issue, but upon probable cause"); Akhil Reed Amar, Fourth Amendment First Principles, 107 HARV. L. REV. 757, 782 (1994) ("[E]ven warrantless searches and seizures ordinarily must be backed by 'probable cause.'"). "The emphasis on encouraging the use of warrants [thus] overlooks probable cause as the primary protection of the citizen's privacy." Joseph D. Grano, A Dilemma for Defense Counsel: Spinelli-Harris Search Warrants and the Possibility of Police Perjury, 1971 U. ILL. L.F. 405, 456; see also Josh Bowers, Probable Cause, Constitutional Reasonableness, and the Unrecognized Point of a "Pointless Indignity," 66 STAN. L. REV. 987, 988 (2014) ("A police officer needs probable cause to arrest a suspect," but "once he has it, he typically needs no more.").
- 3. Craig S. Lerner, *The Reasonableness of Probable Cause*, 81 Tex. L. Rev. 951, 953, 957 (2003); *see also* Christopher Slobogin, *Let's Not Bury* Terry: *A Call for Rejuvenation of the Proportionality Principle*, 72 ST. JOHN'S L. Rev. 1053, 1082 (1998) ("[P]robable cause . . . is the standard with which we are most familiar except that we don't really know what it means.").
- 4. Holmes v. State, 796 A.2d 90, 98 (Md. 2002) ("With the possible exception of 'due process'....").

that provide some basis to believe that "an offense has been or is being committed" by the person to be searched or seized or "that evidence bearing on that offense will be found in the place to be searched." In the moment when a search or seizure is conducted, those facts will be assessed by a law-enforcement officer in real time, with the Fourth Amendment hopefully shaping her conduct, even if she does not have its precise requirements consciously in mind. Whatever may be going through the officer's head, however, a judge must at some point assess her *conduct*—either before the search or seizure takes place (as occurs when a judge reviews a warrant application) or after the fact (as occurs when a judge rules on a suppression motion). In either setting, it is "the magistrate, not the officer, who is to judge the existence of probable cause." The essential task of probable-cause jurisprudence is thus to guide the judge through that decision—and to help everyone else predict how a judge might rule.

That is where the core problem lies. Existing probable-cause jurisprudence says almost nothing at all about either the methodology or the substance of the judge's inquiry: *how* should the judge go about determining the strength of the government's assertions? And *what* counts as strong enough? With striking candor, the Supreme Court has avoided answering either of these essential questions, insisting instead that "[a]rticulating precisely what 'reasonable suspicion' and 'probable cause' mean *is not possible*." Rather, the most explicit guidance the

- 5. Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370 (2009); cf. Jaben v. United States, 381 U.S. 214, 224 (1965) ("[The Government must answer the] hypothetical question, 'What makes you think that the defendant committed the offense charged?'").
- See infra text accompanying note 336 (discussing officers' awareness, or lack of awareness, of Fourth Amendment doctrine).
- 7. Functionally, the judge's analysis is identical whether conducted from the ex ante or ex post perspective, because everything that "transpired at or after the time" of the search or seizure is "irrelevant." Henry v. United States, 361 U.S. 98, 104 (1959); cf. Jeffrey J. Rachlinski et al., Probable Cause, Probability, and Hindsight, 8 J. Empirical Legal Stud. 72, 73 (2011) (noting that this principle is generally followed in practice, hindsight bias notwithstanding).
- 8. Spinelli v. United States, 393 U.S. 410, 423-24 (1969) (White, J., concurring); *cf. infra* text accompanying note 347 (discussing the impact of probable-cause jurisprudence on officer behavior).
- 9. Cf. Ronald J. Bacigal, The Fourth Amendment in Flux: The Rise and Fall of Probable Cause, 1979 U. ILL. L.F. 763, 763 (decrying the lack of "objective methodology" in probable-cause jurisprudence); Andrew E. Taslitz, Cybersurveillance Without Restraint? The Meaning and Social Value of the Probable Cause and Reasonable Suspicion Standards in Governmental Access to Third-Party Electronic Records, 103 J. CRIM. L. & CRIMINOLOGY 839, 856 (2013) (describing the probable-cause standard as, in truth, "no standard at all").
- 10. Ornelas v. United States, 517 U.S. 690, 695 (1996) (emphasis added).

Court has offered is to say that judges should consider the "totality of the circumstances" and then make "a practical, common sense decision," yea or nay. 11 Probable cause, in other words, "is whatever a magistrate says it is." 12

This is a problem in at least two respects. For one, a jurisprudence premised wholly on raw and unstructured "common sense" will struggle to yield a predictable and consistent body of decisions. It will struggle, in other words, to produce "any *law* worthy of the name," let alone a body of law clear enough to guide the civilians it protects or the state actors it governs.¹³ Equally troubling, an amorphous approach to probable cause will leave judges ill equipped to stand as "guardians of the Bill of Rights," in "between the citizen and the police." After all, as the late Justice Scalia observed, judges armed with only their own gut instincts will often lack the "judicial courage" to push back against the state's constant demands for greater police authority—demands grounded in the everpressing and ever-urgent need to ensure the community's safety.¹⁶

In short, an infinitely malleable approach to probable cause raises both rule-of-law and civil-liberty concerns. Recognizing as much, Anthony Amsterdam, in his seminal lectures on the Fourth Amendment, warned against "a [F]ourth

- 11. Illinois v. Gates, 462 U.S. 213, 238 (1983).
- 12. Donald Dripps, *Living with* Leon, 95 YALE L.J. 906, 907 (1986).
- Antonin Scalia, The Rule of Law as a Law of Rules, 56 U. CHI. L. REV. 1175, 1179 (1989) (emphasis added); see also Alschuler, supra note 1, at 227 (observing that rule-based frameworks "tend to limit the importance of subjective judgment, to promote equality, to control corruption, to simplify administration and to provide a basis for planning before and after controversies arise," even if they also run the risk of becoming overly rigid); C.M.A. McCauliff, Burdens of Proof: Degrees of Belief, Quanta of Evidence, or Constitutional Guarantees?, 35 VAND. L. REV. 1293, 1334-35 (1982) (arguing that greater uniformity with respect to probable cause is "essential if judges are to treat like cases alike and promote the integrity of the judicial system"); Ric Simmons, Quantifying Criminal Procedure: How to Unlock the Potential of Big Data in Our Criminal Justice System, 2016 MICH. ST. L. REV. 947, 988 ("[Doctrinal] imprecision has its costs: It creates inconsistency from jurisdiction to jurisdiction and even from judge to judge "); Patricia M. Wald, The Unreasonable Reasonableness Test for Fourth Amendment Searches, 4 CRIM. JUST. ETHICS, Winter/Spring 1985, at 2, 89 (arguing that the judiciary's "ability to maintain its credibility" when applying the Fourth Amendment requires "consistent law" that is "based on . . . paraprinciples . . . that go beyond case-by-case judgments"). On the benefits that clear legal frameworks hold for law-enforcement actors, see infra text accompanying note 342.
- 14. United States v. Calandra, 414 U.S. 338, 356 (1974) (Brennan, J., dissenting).
- 15. Wong Sun v. United States, 371 U.S. 471, 481-82 (1963).
- n6. Scalia, *supra* note 13, at 1180 (arguing that "a firm rule of decision . . . can embolden" judges to protect "the individual criminal defendant against the occasional excesses of th[e] popular will"); *cf.* Roger B. Dworkin, *Fact Style Adjudication and the Fourth Amendment: The Limits of Lawyering*, 48 IND. L. J. 329, 367 (1973) ("[C] omprehensible rules should serve libertarian ends better than the present chaotic state of the law[, for any] rule developed under the [F] ourth [A] mendment is a limitation on the police's power to search.").

[A]mendment with all of the character and consistency of a Rorschach blot."¹⁷ And yet, as Amsterdam reminds us, the Supreme Court also has good reason to shy away from overly structured doctrinal frameworks. Any effort to impose the "discipline of rules upon the richness of events" risks producing a doctrine "improperly insensitive to the practical complexities of life," particularly given the "mindboggling" diversity of law-enforcement/civilian interactions.¹⁸

Citing this fear, the Supreme Court has largely opted for the blot. It defines probable cause as "a fluid concept" that can only ever be understood "in particular factual contexts." And it accordingly rejects efforts to develop "a neat set of legal rules" in this domain, a task it deems "not readily" attainable, "or even usefully" pursued. Scholars routinely criticize the Court for this approach. The most forgiving view it as a "necessary evil," offered up by a Court struggling to balance competing demands for doctrinal flexibility and structure—the animating dilemma of probable-cause jurisprudence.

This Article takes that dilemma by the horns and aims to resolve it. Its goal is to offer a conceptual and doctrinal reconstruction of probable cause that is both supple and substantive enough to meet the Fourth Amendment's many demands—to imagine a Fourth Amendment with more analytic structure and precision than the one we have now, but with no more than we need or than would serve us well. To achieve this goal, the Article reimagines probable cause as an interlocking set of analytic frameworks and substantive standards, each tailored to the unique epistemological and normative challenges posed by different types of Fourth Amendment events. The result is a pluralist array of doctrinal frameworks that, taken together, can meaningfully assess the "many shapes and sizes" of evidence at issue in Fourth Amendment analyses and the "many different types of persons" proffering such evidence to the courts.²²

One primary obstacle stands in the way of this proposed pivot to probable cause pluralism. The Supreme Court routinely insists that, whatever probable

^{17.} Amsterdam, *supra* note 1, at 375.

Id.; see also Alschuler, supra note 1, at 231 (cautioning against "bright-line fever" in Fourth-Amendment jurisprudence).

^{19.} Illinois v. Gates, 462 U.S. 213, 232 (1983).

^{20.} Id.

^{21.} Simmons, supra note 13, at 949, 988-89 (2016); see also Christopher Slobogin, The World Without a Fourth Amendment, 39 UCLA L. REV. 1, 39 (1991) (describing probable cause as "amorphous [and] probably necessarily so").

^{22.} Gates, 462 U.S. at 232.

cause means, it ought to entail a single analytic method applicable "to every inquiry"²³ and a "single, familiar standard"²⁴ by which the product of any such analytic method should be assessed. It espouses, in other words, a commitment to *probable cause unitarianism*. That unitary approach, however, is neither logically nor doctrinally required. Indeed, individual terms of art in the Constitution (and elsewhere) can and do mean different things in different settings—a point that will be appreciated by anyone who has studied the various doctrinal frameworks, tests, and tiers of scrutiny that inform phrases like "equal protection," "due process," or "free exercise."²⁵

Lacking any clear textual or historical definition of its own, the phrase "probable cause" is every bit as open-textured as these other terms of art and is every bit in need of sound analytical and doctrinal exposition. This Article is thus ultimately a project of conceptual and doctrinal construction—an effort to create an analytical framework for probable cause where there currently is none. By necessity, that framework must eschew a single account of probable cause. "One simple rule will not cover every situation." Rather, if probable cause is to mean anything at all, it must come to mean many things at once.

The argument presented here does not proceed on a clean slate. It engages myriad scholarly debates over probable cause's meaning and its method that have

- 23. Florida v. Harris, 568 U.S. 237, 248 (2013).
- 24. Dunaway v. New York, 442 U.S. 200, 213 (1979).
- 25. U.S. CONST. amends. I, V, XIV. See generally William N. Eskridge, Jr., A Pluralist Theory of the Equal Protection Clause, 11 U. PA. J. CONST. L. 1239, 1259 tbl.2 (2009) (discussing the doctrinal pluralism of the First Amendment, Due Process Clause, and Equal Protection Clause). As these analogs make clear, constitutional terms of art often bear multiple meanings. See Ryan D. Doerfler, Can a Statute Have More than One Meaning?, 94 N.Y.U. L. REV. 213, 213 (2019) ("[S]peakers can and often do transparently communicate different things . . . with the same verbalization or written text."); cf. Argersinger v. Hamlin, 407 U.S. 25, 30-31 (1972) (interpreting the phrase "all criminal prosecutions" in the Sixth Amendment to describe one set of cases with respect to the right to counsel and a different set of cases with respect to the right to a jury).
- 26. See JOHN HART ELY, DEMOCRACY AND DISTRUST 12-13 (1980) (describing the role of doctrinal frameworks in affording meaning to open-textured constitutional terms); Richard H. Fallon, Jr., Foreword: Implementing the Constitution, 111 HARV. L. REV. 54, 56, 118 (1997) (same). On the historical and textual ambiguity of the phrase "probable cause," see, for example, BARBARA J. SHAPIRO, BEYOND REASONABLE DOUBT AND PROBABLE CAUSE 140-44 (1991); Thomas Y. Davies, The Fictional Character of Law-and-Order Originalism: A Case Study of the Distortions and Evasions of Framing-Era Arrest Doctrine in Atwater v. Lago Vista, 37 WAKE FOREST L. REV. 239, 370 (2002); Wesley MacNeil Oliver, The Modern History of Probable Cause, 78 TENN. L. REV. 377, 380 (2011); and Barry Jeffrey Stern, Warrants Without Probable Cause, 59 BROOK. L. REV. 1385, 1413 (1993).
- 27. Gates, 462 U.S. at 232.

unfolded over the past half century. For the first time, however, this Article attempts to unite those discrete and sometimes competing accounts into a single, comprehensive theoretical framework. One advantage of such an integrated approach is its ability to assess the constitutionality of any given search or seizure—from the warrantless police tactics that define modern street policing, to the more mundanely programmatic searches conducted by city health inspectors, to all the many cases between and beyond those two examples, including many that are typically examined under the Fourth Amendment's "reasonableness clause." Indeed, once probable cause emerges as a pluralist concept in its own right, the much discussed (and often distracting) distinction between the Fourth Amendment's warrant clause and its reasonableness clause begins to fall away, enabling a single conceptual framework to assess *all* Fourth Amendment searches and seizures.²⁹

Of course, to state this ambition is to underscore the central challenge confronting this project: the universe of searches and seizures "can vary almost infinitely." This Article thus starts by bringing some order to that wide-ranging diversity by making two initial and important moves. First, it organizes the wide world of Fourth Amendment events into a manageably discrete taxonomy that surfaces the essential epistemological and normative challenges underlying any given Fourth Amendment case. Second, it navigates those epistemological and normative challenges by disaggregating the probable-cause inquiry itself into three basic questions – three analytic axes – that structure every Fourth Amendment analysis and outline how that analysis ought to proceed.

The first of these two moves is both methodologically and normatively significant. For starters, it rejects the Supreme Court's oft-stated and animating fear that judges simply cannot "comprehend the protean variety" of the Fourth Amendment's terrain.³¹ The argument here, by contrast, proceeds from—and substantiates—an alternative premise: searches and seizures, for all their undeniable variability, "fall into readily identifiable patterns, which practitioners in

^{28.} See infra Part III.

^{29.} The argument here thus resonates with Akhil Amar's claim that probable cause should play a less central role in Fourth Amendment administration, insofar as this Article similarly treats the concept of "reasonableness" as central to the amendment's conceptual and doctrinal structure—and indeed as central to the meaning of probable cause itself. See Amar, supra note 2, at 782; infra Part III.

^{30.} Arkansas v. Sanders, 442 U.S. 753, 757 (1979).

^{31.} Terry v. Ohio, 392 U.S. 1, 15 (1968).

the field can easily sort into . . . archetypal cases."³² Indeed, the Court itself sometimes acknowledges as much, treating certain Fourth Amendment events "as categorically distinct" from others.³³ Only by recognizing these categories, however, can we begin to construct an account of probable cause that injects a greater semblance of law into the Fourth Amendment analysis.

Beyond offering analytic clarity, however, a categorical lens is also normatively superior to the status quo because it forces courts to consider how their decisions affect *groups* of people that, by definition, include a great many *innocent* individuals.³⁴ If Fourth Amendment questions are "only decided in the concrete factual context of individual case[s]," the image of guilty defendants will loom large, because they are the ones challenging their searches or seizures.³⁵ A categorical analysis, however, focuses on the entire *pool* of people impacted by different types of searches or seizures and thus reminds us that a search of any man "must be regarded as a search . . . of Everyman," including those who are innocent of whatever misconduct the police suspect.³⁶

- 32. Andrew Manuel Crespo, Systemic Facts: Toward Institutional Awareness in Criminal Courts, 129 HARV. L. REV 2049, 2072 (2016); see Dworkin, supra note 16, at 367 ("What we too often forget... is that not all cases are hard ones. Most are readily classifiable instances of frequently recurring conduct."); cf. Alschuler, supra note 1, at 241 ("[When] [F]ourth [A]mendment issues do recur often enough to lend themselves to [doctrinal and conceptual] generalization," the "courts have a duty to provide it.").
- 33. Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 374 (2009); cf. Ornelas v. United States, 517 U.S. 690, 703 (1996) (Scalia, J., dissenting) (acknowledging that "fact patterns will occasionally repeat themselves" and thus generate legal rules that can "provide useful guidance" for future probable-cause analyses).
- 34. *Cf.* District of Columbia v. Wesby, 138 S. Ct. 577, 588 (2018) ("[P]robable cause does not require officers to rule out . . . [an] innocent explanation for suspicious facts [because] the relevant inquiry is not whether particular conduct is 'innocent' or 'guilty,' but the degree of suspicion that attaches to particular types of *noncriminal* acts." (quoting Illinois v. Gates, 462 U.S. 213, 244 n.13 (1983)) (emphasis added) (internal quotation marks omitted)).
- 35. Sibron v. New York, 392 U.S. 40, 59 (1968).
- 36. Brinegar v. United States, 338 U.S. 160, 181 (1949) (Jackson, J., dissenting); cf. Draper v. United States, 358 U.S. 307, 314 (1959) ("A rule protective of law-abiding citizens is not apt to flourish where its advocates are usually criminals. Yet the rule we fashion is for the innocent and guilty alike."). Of course, sometimes the underlying criminal code is so broad as to make "Everyman" a criminal with respect to at least certain categories of offenses a point scholars and jurists alike decry in an era marked by wide scale overcriminalization. See Yates v. United States, 135 S. Ct. 1074, 1100 (2015) (Kagan, J., dissenting); William J. Stuntz, The Pathological Politics of Criminal Law, 100 MICH. L. REV. 505 (2001). But here, too, a categorical analysis offers the advantage of making the costs of such overcriminalization more explicit. An expansive penal code, after all, does not just make it possible for "almost anyone" to be convicted of a crime. Robert H. Jackson, The Federal Prosecutor, 24 J. Am. Judicature Soc'y 18, 19 (1940). It means "almost anyone can be arrested for something," too. Nieves v. Bartlett, 139 S. Ct. 1715,

A meaningful jurisprudence of probable cause must do more, though, than merely bring these latent questions and concerns to the surface. It must be able to navigate them and help discern some answers. To that end, this Article constructs a robust analytic framework that aims to structure the probable-cause inquiry by disaggregating it into three central questions that arise in every Fourth Amendment case. The first and second of these questions are methodological: how ought one assess the *evidentiary claim* offered in support of a search or seizure? And how ought one assess the *proponent* of that evidentiary claim?³⁷ The third then considers the substantive threshold of certainty – the standard of proof – that those two methodological assessments must satisfy.

Together, these three questions form probable cause pluralism's core analytic axes. Each one implicates longstanding debates in probable-cause jurisprudence and scholarship. The first runs headlong into a persistent debate over whether to assess probable cause statistically or to rely instead on the expert intuition of judges or police officers (or both). Part I aims to resolve that debate by marking, in pluralist fashion, the zones within which each of those opposing methods ought to predominate. The second axis then turns to the perennial question of credibility. In Part II, the Article offers a novel framework that provides doctrinal tools that courts can use to hold the government accountable for different types of unreliable witnesses. Finally, Part III addresses the inescapable interest-balancing effort that underlies every Fourth Amendment inquiry. Here, the Article offers an integrated account of the Fourth Amendment's warrant and reasonableness clauses that aims to resolve longstanding debates about how these two clauses interact. Moreover, it offers a doctrinally administrable means of balancing the Fourth Amendment's competing concerns for liberty and security – one that anchors probable cause to a preponderance of the evidence standard while allowing that default standard to be adjusted or even abandoned altogether in certain types of cases.

As should be clear from even just this overview, none of these questions has easy answers and unpacking them will consume much of the discussion to come. The basic contours of this discussion are summarized in the table below.

^{1730 (2019) (}Gorsuch, J., concurring in part and dissenting in part) (emphasis added); see also infra note 330.

^{37.} See Charles E. Moylan, Jr., Hearsay and Probable Cause: An Aguilar and Spinelli Primer, 25 MERCER L. REV. 741, 750 (1974); see also Andrew E. Taslitz, Foreword, 73 LAW & CONTEMP. PROBS., Summer 2010, at i-ii.

TABLE 1.

OVERVIEW OF PROBABLE CAUSE PLURALISM'S ANALYTICAL AXES

Axis	Core Question	Core Issue	Categories of Cases
I E	How to Assess Evidentiary Claims?	Choosing Between Statistical, Intuitive, and Deferential Modes of Analysis	Primary & Ultimate Facts
			Thin Scripts
			Narrative Mosaics
			Mixed(-Up) Claims
II	How to Assess Claim Proponents' Credibility?	Identifying Credibility Baselines and Reacting to Weak Ones	Civilians
			Officers
			Informants
			Anonymous Witnesses
III	How to Determine Certainty Thresholds?	Balancing State and Private Interests	The Anchor
			The Adjustments
		Tilvace interests	The Poles

Finally, Part IV brings the three analytic axes together. Here, the Article presents a unified framework that is capable not only of assessing future cases but also of looking backwards to evaluate the body of cases that have come before. In fact, it is those prior cases that constitute much of the raw material for the framework offered here. For while the Supreme Court often espouses a commitment to probable cause unitarianism, it does not always practice what it preaches. Rather, the Court's unitarian incantations crowd out myriad pluralist notes within its own probable-cause canon – notes that tend to be heard only as minor, discordant themes, or (more typically) to be ignored altogether.

Half a century into sustained probable-cause scholarship and two centuries into the Supreme Court's probable-cause jurisprudence, no prior effort has been made to unite these pluralist themes into a coherent whole or to fashion from them an alternative framework for assessing searches and seizures. This Article aims to supply such a framework. It provides an argument for the probable cause pluralism that the Supreme Court ought to adopt and a description of the latent pluralism that the Court has already embraced. Like any good framework, this Article does not pretend to offer a mechanical formula that will definitively resolve every case or every probable-cause debate. Rather, its central purpose is to

structure the thought process by which the constitutionality of any given search or seizure ought to be determined and thus to surface and contextualize the fundamental normative judgments at issue. Answering those newly reframed questions remains the hard work of judging. But with a suitable framework in hand, that work can at least—and at last—be undertaken in earnest.³⁸

I. AXIS ONE: ASSESSING EVIDENTIARY CLAIMS

In virtually every Fourth Amendment case, the government makes an assertion, based on a set of supporting facts, that the search or seizure at issue is constitutional because its target is sufficiently connected to some specific illegal act.³⁹ That assertion constitutes the government's evidentiary claim, which must be assessed by asking a basic probable-cause question: taking the asserted facts *as true*, how *likely is it* that the target is either a person who committed an illegal act or a place that contains evidence of such an act? That likelihood, however, can be assessed in very different ways. It can be assessed probabilistically, drawing on statistics derived either from the circumstances of the event at hand or the success rates of similar past searches or seizures. Alternatively, it can be assessed qualitatively, relying on either the decision-maker's intuitive appraisal of the factual narrative at issue, on deference to the acquired expertise of law-enforcement actors, or on some combination of the two.⁴⁰

Scholars on both sides of this methodological divide hold that only one method—statistical *or* qualitative—should be the one true mode of assessing evidentiary claims.⁴¹ Pluralism's core contribution, however, is to caution against

- **38.** Cf. New Jersey v. T.L.O., 469 U.S. 325, 370 (1985) (Brennan, J., dissenting) ("I do not pretend that our traditional Fourth Amendment doctrine automatically answers all of the difficult legal questions that occasionally arise. I do contend, however, that this Court has an obligation to provide some coherent framework to resolve such questions").
- **39.** See Bowers, supra note 2, at 999 ("[P]robable cause is designed to ensure that the state can establish sufficiently the *empirical fact* of legal guilt"). But cf. infra Section III.C (discussing a narrow category of suspicionless searches).
- 40. See Barbara D. Underwood, Law and the Crystal Ball: Predicting Behavior with Statistical Inference and Individualized Judgment, 88 YALE L.J. 1408, 1420-21 (1979) (describing "two competing approaches to the problem" of "predicting individual behavior," one of which "relies on the subjective judgment of experienced decisionmakers" and the other of which relies on "statistical prediction"); see also Charles Yablon, The Meaning of Probability Judgments: An Essay on the Use and Misuse of Behavioral Economics, 2004 U. ILL. L. REV. 899, 906 (2004) ("[P]robability is a concept that can be conceived of and understood in a variety of different ways.").
- 41. The terms "probabilistic," "statistical," and "quantitative" are used here (as elsewhere in the literature) as synonyms for a common analytic method. For a sampling of the methodological debate, compare Ronald J. Bacigal, *Making the Right Gamble: The Odds on Probable Cause*, 74

championing one of these methods over the other in the abstract, or (worse still) to insist that only one method can ever be applied. The Supreme Court recently endorsed such a unitarian approach in *Florida v. Harris.*⁴² But this Part argues that approach is misguided. Some cases, by their very nature, must be assessed by a fundamentally statistical method, while others demand a more qualitative and intuitive approach, and still others call for both methods to be applied at once.⁴³

To see the virtues of this pluralist account, we must first tackle the hard question of articulating which method to apply in any given case. The central difficulty is that any given evidentiary claim can arise from an infinite universe of details. Fortunately, however, that universe can also be systematically organized—into four discrete and comprehensive categories of evidentiary claims.

FIGURE 1. AXIS ONE: TYPES OF EVIDENTIARY CLAIMS, ORGANIZED BY COMPLEXITY



This conceptual schematic organizes the four categories of evidentiary claims according to their complexity, such that the simplest claims appear at the leftmost pole and the most complex claims appear to the right. Thus, at the far left,

MISS. L.J. 279, 297 (2004) ("All evidence is probabilistic, requires inferences to support an ultimate conclusion, and thus involves a risk of error. Statistical evidence is different only in that it makes these uncertainties explicit."), and Max Minzner, *Putting Probability Back into Probable Cause*, 87 TEX. L. REV. SEE ALSO 913, 915 (2009) ("[T]he probable-cause determination is explicitly and exclusively a statement about the probability of a particular outcome..."), with Orin Kerr, *Why Courts Should Not Quantify Probable Cause*, in The Political Heart of Criminal Procedure 143 (Michael Klarman et al. eds., 2012) ("Only an approach to probable cause steeped in learned judgment, based on intuition and situation sense, can accurately reflect the unknowns and ensure accurate probable cause determinations.").

- 42. 568 U.S. 237 (2013).
- **43.** *Cf.* Underwood, *supra* note 40, at 1409 (describing the need to choose the method "most appropriate to a particular factual context"); Yablon, *supra* note 40, at 966 ("[J]udging the correctness of probability judgments depends on the precise nature of the probability question at issue ").

we have "primary and ultimate facts," evidentiary claims that arise frequently in practice but that are ultimately so straightforward that they drop out of the Axis One inquiry. These claims arise whenever a witness reports that she has directly observed X person commit Y offense or has directly observed evidence of Y offense in location Z. In these instances, someone essentially claims, "I saw Mister Barton" commit the offense. Such assertions are commonplace in the day-to-day practice of law enforcement, occurring whenever victims report instances of interpersonal violence, when informants reveal offenses to law enforcement or when police officers themselves directly observe public-order offenses. By their very nature, these claims are self-proving: if the facts asserted are taken as true—as they always are for Axis One of the framework—then the claim itself is proof positive of the target's implication in illegal behavior. There is thus no need to identify any further analytic method for assessing a primary and ultimate fact at this stage of the inquiry.

The three remaining types of evidentiary claims, by contrast, all require some inference to be drawn under conditions of uncertainty. That is to say, even taking the facts as true, it remains *unclear* whether or not the target is implicated in the asserted illegal act. What distinguishes these three types of claims from one another is the nature of the inference that needs to be drawn, and of its supporting facts. Specifically, some of these claims — what this Article terms *thin scripts* — are so straightforward (and often so replicable) that their core epistemology is inherently quantitative and often statistically grounded. By contrast, another set of claims — what this Article terms *narrative mosaics* — are so unique and factually rich that they defy statistical assessment and call instead for an intuitive, qualitative approach. Finally, yet another type of claim — what the Article calls *mixed claims* — blends features of thin scripts and narrative mosaics and thus calls for a mode of assessment that can navigate that duality.

In spite of this diversity, the Supreme Court insists that every evidentiary claim should be assessed "much like any other." More specifically, it demands that a "flexible, common-sense" mode of analysis be applied to "every inquiry into probable cause." A primary contribution of this Part is to push back against that unitarian idea—to mark a zone of cases (namely, thin scripts) within

^{44.} The phrase is borrowed from Brinegar v. United States, 338 U.S. 160, 166 (1949).

^{45.} *Cf.* ARTHUR MILLER, THE CRUCIBLE 26 (1953) ("I saw Mister Barton with the Devil!"). Of course, as this literary example shows, the credibility of the *claimant* remains an essential issue (taken up in Part II), even for claims constituting primary and ultimate facts.

^{46.} See Dumbra v. United States, 268 U.S. 435, 441 (1925) (describing a failure to find probable cause when a credible witness alleges a primary and ultimate fact as attributable "only to a lack of intelligence or a singular lack of practical experience").

^{47.} Harris, 568 U.S. at 247.

^{48.} Id. at 240, 248.

which application of the statistically grounded probabilistic method is required and to delineate another zone of cases (narrative mosaics) in which the qualitative method is appropriate. Embracing pluralism, this Part thus defends the statistical method against its critics, while also offering a partial defense of the qualitative method against *its* critics, who see that approach as irredeemably subjective, inconsistent, and biased.

The remainder of this Part examines thin scripts, narrative mosaics, and mixed claims in turn.

A. Thin Scripts and the Statistical Method

This Article uses the term "thin script" to refer to any evidentiary claim in which the government asserts that a *single fact* (or a very small set of interrelated facts) is sufficient *in and of itself* to establish the likelihood that the target of a search or seizure is involved in illegal activity.⁴⁹ As the discussion in this Section will show, these claims are inherently quantitative. To flesh out this type of evidentiary claim and to surface that core epistemology, consider a trio of archetypical examples that together constitute the category.

First, a thin script can arise when the *logical circumstances* of a case create a probabilistic likelihood that a given target is implicated in illegal behavior. Consider, for example, an actual case in which an officer pulls over an illegally swerving car only to find when he approaches the vehicle that there are three men who appear to be passed out drunk in the backseat—and no one in the driver's seat.⁵⁰ Or consider another case in which officers chase an armed robber into a hotel containing twenty rooms but lose sight of him before seeing which room he enters.⁵¹ In both cases, the facts lay out a complete set of possible targets for a

- **49.** The term "script" captures the fact that these cases often arise time and again, with the government invoking precisely that repetition to claim that a given fact reliably signals criminality. *See infra* note 91.
- 50. See JOSHUA DRESSLER & GEORGE C. THOMAS III, CRIMINAL PROCEDURE 166-67 (4th ed. 2010) (describing these facts as a "true case recounted" by the "judge who had this case"). The case predates driverless cars and the officer did not see anyone leave the vehicle. Two of the men in the backseat are thus apparently innocent passengers while the third is clearly the illegally swerving (and presumably drunk) driver, feigning sleep. See Filmon v. State, 336 So. 2d 586, 591 (Fla. 1976) (finding probable cause to search five unconscious people in the immediate aftermath of a drunk-driving accident when there was no basis to identify who was the driver).
- 51. See United States v. Winsor, 846 F.2d 1569, 1571 (9th Cir. 1988) (en banc) (finding no probable cause); see also State v. Smith, 344 N.W.2d 505, 507 (S.D. 1984) (upholding the search of both apartments in a duplex where a burglar's footprints led to the building but did not indicate which unit was entered).

search or an arrest while simultaneously indicating that only one of those targets is actually implicated in illegal behavior. Thus, the likelihood that one of the three men in the back seat is the drunk driver or that one of the twenty hotel rooms contains the robber are, well, one in three and one in twenty.⁵²

Second, thin scripts can also arise when the government relies on a *mechanical process* to indicate the connection between a target of a search or seizure and some illegal act. Examples here include fingerprint-matching or DNA-matching processes, or devices such as microwave scanners and drug-sniffing dogs.⁵³ Crucially, these mechanical searches do not yield signals that are primary and ultimate facts in and of themselves, as no witness purports to be certain that the target is implicated in the alleged offense. Rather, the usefulness of the signal depends entirely on the reliability of the process or device that produces it, such that the reliability itself must be assessed in some way.⁵⁴

Finally, a third form of thin script arises when the government relies exclusively on a *profile* to demonstrate the likelihood that a given person or place is implicated in illegal behavior. The word "profile" has a loaded connotation in the law-enforcement context that will be explored further in a moment. ⁵⁵ For present purposes, however, it is important to note that the word is intended here to refer broadly to any claim that a characteristic shared by multiple people or places correlates with some specific illegal activity, such that the correlation itself demonstrates the likelihood that an individual target with that characteristic is engaged in such activity. Some common examples include claims that "people carrying significant amounts of illegal drugs" tend "to be carrying guns" or tend to have additional evidence of drug dealing in their houses; ⁵⁶ that people who

- 52. One might adjust these probabilities to differentiate, for example, between rooms on the first and second floors of the hotel. Alternatively, one might invoke what statisticians call the "indifference principle" to justify the assumption that the probability is equal across targets. See Yablon, supra note 40, at 912-13. In any event, the key point is that it is purely the logical circumstances of the scenario that dictate the likelihoods of interest.
- 53. See W. David Ball, The Plausible and the Possible: A Bayesian Approach to the Analysis of Reasonable Suspicion, 55 AM. CRIM. L. REV. 511, 527-28 (2018); Erica Goldberg, Getting Beyond Intuition in the Probable Cause Inquiry, 17 LEWIS & CLARK L. REV. 789, 798, 813 (2013).
- 54. Cf. Illinois v. Caballes, 543 U.S. 405, 411 (2005) (Souter, J., dissenting) ("The infallible dog... is a creature of legal fiction."); Natalie Ram, The Mismatch Between Probable Cause and Partial Matching, 118 YALE L.J. POCKET PART 182 (2009) (describing potential weaknesses in partially matching DNA).
- 55. See infra notes 74-75 and accompanying text.
- 56. Florida v. J.L., 529 U.S. 266, 273 (2000); cf. Simmons, supra note 13, at 960-61 ("Police officers routinely testify . . . that individuals suspected of engaging in narcotics transactions are more likely to have weapons on their person."). Compare United States v. Thomas, 989 F.2d 1252, 1254 (D.C. Cir. 1993) (accepting the profile described in the text), and Holmes v. State, 796

engage in child molestation tend to possess child pornography on their computers;⁵⁷ that people who flee from the police in so-called high-crime areas tend to possess contraband;⁵⁸ or that Latinos driving certain vehicles near the border tend to be engaged in illegal smuggling.⁵⁹ In each of these examples, the fact that a specific target matches the profile is offered as the sole justification for any ensuing search or seizure, even though the government does not claim that *all* persons matching the profile are doing something illegal. Thus, the likelihood that the specific target at issue actually *is* doing something illegal depends on the reliability and strength of the profile.

A common and defining feature of thin scripts emerges from these three constitutive examples: their assessment requires application of a quantitative mode of analysis, grounded in empirical—often statistical—realities. As noted earlier, some scholars generalize this claim to *all* probable-cause analyses, arguing that probable cause itself is an inherently statistical concept.⁶⁰ A close reading of the literature, however, shows that arguments promoting the probabilistic method ring truest when they are made against the backdrop of one of the three types of thin scripts just described. Indeed, the quantitative nature of the logical-circumstances cases is inescapable: one (and only one) of the three men in the backseat of the car can be the driver, just as one (and only one) of the twenty hotel rooms

- A.2d 90, 99-100 (Md. 2002) (same), with State v. Kahn, 555 N.W.2d 15, 19 (Minn. Ct. App. 1996) (rejecting the profile).
- 57. See Carmelo Tringali, Comment, Connecting the Dots: The Ninth Circuit's Refusal to Find Probable Cause in Dougherty v. City of Covina, 45 Loy. L.A. L. Rev. 985, 990 (2012) (describing the circuit split over the validity of this profile).
- 58. See Illinois v. Wardlow, 528 U.S. 119, 124 (2000); Ben Grunwald & Jeffrey Fagan, The End of Intuition-Based High-Crime Areas, 107 CALIF. L. REV. 345, 351 (2019) (deploying statistical analyses to assess high-crime areas).
- 59. See United States v. Brignoni-Ponce, 422 U.S. 873, 885 (1975).
- 60. See supra note 41. Other scholars, including me, have been enthusiasts of the statistical method, if not quite absolutists. See Crespo, supra note 32, at 2070-86; see also David Rudovsky & David A. Harris, Terry Stops and Frisks: The Troubling Use of Common Sense in a World of Empirical Data, 79 OHIO ST. L.J. 501, 537 (2018) ("We believe that data analysis provides a highly reliable basis for empirical evaluation of the factors that courts have identified as relevant to the issue of reasonable suspicion."); Simmons, supra note 13, at 1017 ("The time has come for courts to embrace the enhanced precision and transparency that big data has to offer."). Still others have expressed openness to a pluralist methodology, albeit without fully mapping out what such pluralism would entail. See, e.g., Ronald M. Gould & Simon Stern, Catastrophic Threats and the Fourth Amendment, 77 S. CAL. L. REV. 777, 794 (2004); Slobogin, supra note 21, 81-82; Taslitz, supra note 9, at 878-79. Erica Goldberg offers the most fulsome argument for a pluralist methodology with respect to probable cause's first axis but limits her endorsement of the statistical method to mechanical searches (and expressly disavows it for profiles). See Goldberg, supra note 53.

can contain the fleeing robber. It would defy common sense to discuss the relevant likelihoods other than by reference to their numerical ratios. ⁶¹ Similarly, the only meaningful way to assess the reliability of either a mechanical device or a profile is to consider the associated success rates that show whether the device or profile "actually 'works' at identifying criminals." ⁶² It would make little sense, after all, to draw no distinction between devices that are accurate ten, fifty, or seventy-five percent of the time. ⁶³

And yet, while the quantitative method seems a natural fit for assessing thin scripts, the approach has its critics who raise three distinct types of objections. The first is philosophical, rejecting the statistical approach on the ground that "justice requires individualized decisionmaking, and that statistical methods fail to satisfy that requirement." The second is practical, contending that the statistical method is too hard to execute well and thus should not be attempted at all. Finally, there is a doctrinal critique, grounded in the view that the Supreme Court has simply foreclosed a quantitative approach to probable cause. Let us examine these objections in turn.

1. The Philosophical Critique

The philosophical argument against the probabilistic method rests on the idea that "individualized suspicion" is a "moral requirement of probable cause." Proponents of this view contend that every probable-cause analysis should turn on "the thoughts, actions, character, and history" of the specific target at issue, rather than on a "generalized objective statistical probability linking [the target] to a crime," lest the probable-cause inquiry be reduced to an assessment of "betting odds" that "wrongfully 'gambles' with a citizen's liberty

- **61.** See Yablon, supra note 40, at 907 ("[I]f there are fifty faculty members at my law school and ten of them smoke, the probability that any given member of the faculty is a smoker is 10/50 or twenty percent.").
- **62.** Morgan Cloud, Search and Seizure by the Numbers: The Drug Courier Profile and Judicial Review of Investigative Formulas, 65 B.U. L. REV. 843, 859 (1985).
- **63.** See id. at 860 (discussing profiles); Goldberg, supra note 53, at 790-94 (discussing mechanical searches); Simmons, supra note 13, at 960-61, 986 (discussing profiles and mechanical searches); see also Taslitz, supra note 9, at 878 (urging probabilistic assessment of all uniform processes); Yablon, supra note 40, at 903 (same).
- 64. Underwood, supra note 40, at 1425.
- **65**. Taslitz, *supra* note 37, at v.
- **66**. *Id*.
- 67. Taslitz, supra note 9, at 869.

or privacy."⁶⁸ If this objection is analyzed through the lens of thin scripts, however, it becomes clear that it is not really aimed at probabilistic methodology at all. Rather, it is largely an argument about error rates and certainty thresholds—about how *strong* and how *accurate* probabilities should be. It is also, sometimes, an argument about race.

To appreciate these points, note at the outset that one of the three types of thin scripts just described – mechanical searches – almost never draws an objection for failing to produce *individualized* suspicion. Few would argue, for example, that a person whose car is searched following an alert from a drug-sniffing dog has been subjected to a search lacking individualization. After all, the dog has just singled out one individual car. But consider what the dog's bark actually means: there is a chance (that is to say, a "generalized objective statistical probability")⁶⁹ that the car contains drugs, with that chance simply defined by the dog's success rate when performing this type of search. Thus, if the dog is accurate roughly sixty percent of the time, the car has roughly a sixty percent chance of containing drugs.⁷⁰ The only thing that "individualizes" *this* car, however, is that it happens (for whatever reason, or for no reason at all) to have been subjected to the dog's sniff.⁷¹

And crucially, that is what "individualization" always means in the context of thin-script analysis — because something always places the individual target at issue within a larger group whose members have some identifiable probability of being linked to criminality. Thus, few would object to an arrest of one of the three drunk men in the backseat of the car on the ground that the officer lacks *individualized* suspicion. After all, the officer saw this individual car swerving moments earlier and has thus identified a specific group of people (the occupants of the car) that she believes to contain a drunk driver. Similarly, few would say that officers lack *individualized* suspicion to stop someone solely on the ground that he ran from the police in a high-crime area — even though the government's sole justification for the stop is that the group of people who run from the police under such circumstances contains a specific subset of individuals who are carrying illegal contraband. And by extension of precisely this same logic, one ought not decry a lack of *individualized* suspicion when a van is stopped within two miles of the border solely on the asserted ground that driving a van in that area

⁶⁸. Bacigal, *supra* note 41, at 296.

^{69.} Taslitz, supra note 9, at 869.

^{70.} Accuracy here is defined by success rate in the field. *See infra* note 100; *cf. infra* note 88 (discussing complications and limitations of the method).

Under current Supreme Court doctrine, the sniff itself is not a search and thus can indeed be
performed for no reason at all. See Illinois v. Caballes, 543 U.S. 405 (2005).

correlates with smuggling activity. In each instance, some individual act – being in the back seat of the car, running from the police in a given location, or driving a van in a given location – puts the individual target into a class of people about whom the police claim to be able to discern a specific likelihood of criminal behavior. That is individualization.⁷² And its conjunction with probabilistic reasoning yields no more of a "gamble" with individual liberty than occurs in every probable-cause analysis, given that the true culpability of the target is *always* unknown when a search or seizure takes place.⁷³

Indeed, objections to probabilistic reasoning are on their surest footing when the underlying evidentiary claim does not rely on the target's individual *action* at all but rests instead entirely on a demographic profile—as would be the case if, for example, the police claimed authority to search or arrest *any* Latino man under twenty-five on the basis of an asserted correlation between that demographic profile and some specific criminal act. It is important, however, not to conflate objections to racial profiling with objections to the statistical method writ large. The complicated sociological nature and history of race in America provide reasons to limit the use of racial profiles. Note, however, that those reasons "involve policy considerations independent of the empirical validity of the profile," con-

- 72. See Slobogin, supra note 21, 83 ("[A] person targeted by a profile is being stopped for characteristics or actions specific to that individual . . . which, when taken together, happen to correlate at a particular level with [criminality]."). As David Enoch and Talia Fisher explain, statistical evidence may sometimes be epistemically inferior to case-specific evidence because it lacks "sensitivity" to an alternative outcome. David Enoch & Talia Fisher, Sense and "Sensitivity": Epistemic and Instrumental Approaches to Statistical Evidence, 67 STAN. L. REV. 557, 573-77 (2015). But as they also rightly note, such "epistemic considerations alone [cannot] defeat considerations of accuracy when it comes to legal policy" and thus do not support rejecting statistical evidence simply because it will not yield case-specific conclusions. Id. at 580 (emphasis added). Rather, Enoch and Fisher contend that we ought to reject statistics in legal decision-making only if rational private actors might be marginally less deterred from wrongdoing as result - the idea being that people who know ex ante that statistics will influence the imposition of liability may think that their own individual actions have less impact on their being punished. Id. at 581-85. The preconditions for this concern, however, are speculative in the context of searches and seizures, the targets of which may not have the information, opportunity, or predisposition to engage in such marginal-utility analyses. Enoch and Fisher's deterrence concern is thus bracketed here as a context-specific policy consideration that might sometimes offset our first-order goal: adopting a doctrinal framework that gets probable cause right. Cf. Bacigal, supra note 41, at 303 ("[S]ome [statistical profiles] create social costs that outweigh their benefits, while others do not.").
- 73. See Bacigal, supra note 41, at 297 ("Statistical evidence is different only in that it makes these uncertainties explicit. Society cannot avoid 'gambling' with citizens' liberties unless one hundred percent certainty becomes the prerequisite to arrests and searches.").

siderations that may well be compelling but that do not support "a blanket rejection of the factual reliability . . . of *all* profiles."⁷⁴ Perhaps more significantly, demographic profiles alone rarely produce correlations with criminal activity strong enough to support a claim that most members of a given racial group—or even a large proportion of them—are engaged in any specific criminal activity.⁷⁵

And that is ultimately the real question at the heart of the issue: how strong *is* the asserted correlation? For on close inspection, many objections to probabilistic analysis ultimately boil down to a concern over the number of innocent people who might be caught in probabilism's net. But this is not an objection to methodology at all. Rather, it is an argument about where to set the standard of proof—an issue addressed by probable cause's third analytic axis, not its first. ⁷⁶ To appreciate this point, consider two useful hypotheticals, the first of which exposes the core concern over error rates, and the second of which shows the relationship between that core concern and the raw number of people affected by a search or seizure.

The School Search. Imagine that a small high school conducts a methodologically sound anonymous survey of all one hundred of its students and learns that, at any given moment, one-fifth of the student body is

- 74. Bacigal, *supra* note 41, at 300-04; *see also* Benjamin Eidelson, *Individualism*, *Respect, and Colorblindness* 129 YALE L.J. (forthcoming 2020) (manuscript at 50-51) ("[I]nferences from race to crime are so redolent of the profound contempt that has long underlain them, and thus are so likely to cause deep hurt, that . . . their social meaning rules them out-of-bounds even in circumstances in which they may be epistemically unimpeachable"). As Barbara Underwood notes, there are also accuracy-related concerns with racial profiles, as "decisionmakers may be influenced by negative views about minority racial groups [that cause them] to make negative predictions even when the predictive power of race is nonexistent." Underwood, *su-pra* note 40, at 1434-35.
- 75. See Simmons, supra note 13, at 986 ("Law school hypotheticals aside, it is hard to imagine a situation in the real world where group characteristics alone rise to the level of reasonable suspicion..."). Of course, if probabilistic reasoning shows that members of multiple racial groups likely commit a specific type of crime but the police target members of only one of those groups, that raises constitutional concerns but under the Equal Protection Clause. See Whren v. United States, 517 U.S. 806, 813 (1996); cf. infra note 330. It is also important to note that the Fourth Amendment requires a showing that a "specific crime has been or is being committed." Berger v. New York, 388 U.S. 41, 56 (1967) (emphasis added). Absent that limitation, probabilistic arguments could support arresting anyone at anytime, as most Americans have committed multiple criminal acts. See President's Comm'n on Law Enf't & Admin. Of Justice, The Challenge of Crime in a Free Society 43 (1967).
- **76.** See infra Part III.

carrying cocaine.⁷⁷ Note that these anonymous survey responses are indistinguishable from a series of individual confessions, which (if not anonymous) would be sufficient grounds to authorize a search or arrest of each confessor.⁷⁸ Now, imagine that instead of showing a one-in-five rate of drug possession, the survey shows that ninety-eight percent of students are carrying cocaine at any given moment—or, if you prefer, that ninety-eight percent of them are illegally carrying a concealed firearm. Should random or dragnet searches of all one hundred students be permitted under any of the scenarios just described?

The Power Company Search. Imagine that a local power company develops an algorithm that can identify when its customers are using electricity to grow illegal marijuana in their homes.⁷⁹ Imagine next that the company sends one of three reports to the police: the first says that one of two apartments in a specific duplex is manufacturing marijuana; the second says that half of the apartments in a four-hundred-unit complex are manufacturing marijuana; and the third says that half of the people in Brooklyn are manufacturing marijuana. Should a search of both duplex apartments, of all four hundred units in the larger building, or of every house in Brooklyn be permitted, based on the reports just described?

With respect to the high-school hypothetical, many people—though certainly not all—might think random searches of the students' pockets or a dragnet search of all one hundred should be prohibited if only twenty percent of the students have anonymously confessed to drug possession. But many of those same people might turn around and support such searches if ninety-eight out of one hundred students have confessed—either to carrying drugs, to carrying guns, or in both circumstances. Any such distinction, however, cannot rest on an objection to the underlying probabilistic method, which is being employed identically (and exclusively) in each scenario. Rather, the objection simply derives from the varying strength of the underlying probabilities.

And as the second hypothetical shows, intuitions about how strong those probabilities ought to be have a dynamic relationship both to the raw number of people affected and the state's underlying interests. For while many people (including some judges) might let the police search both apartments in the duplex

Cf. Kerr, supra note 41, at 135-37 (using a similar hypothetical to critique the probabilistic method).

^{78.} See Rawlings v. Kentucky, 448 U.S. 98, 111 (1980).

^{79.} *Cf.* Naperville Smart Meter Awareness v. City of Naperville, 900 F.3d 521, 529 (7th Cir. 2018) (holding that similar technology constitutes a search if employed by a public utility).

for marijuana, ⁸⁰ fewer would allow the police to search all four hundred units in the high-rise. And fewer still would sign a warrant authorizing a search of every house in Brooklyn, which would be virtually indistinguishable from the General Warrants that the Fourth Amendment intended to prohibit. And yet, if we switch the underlying state interest at stake—by imagining that the power company's algorithm now shows that houses in Brooklyn have dangerously inefficient wiring that could ignite—we might readily *allow* building inspectors to check the wires in every house, even over owners' objections. Indeed, the Supreme Court's "administrative search" doctrine permits precisely such statistically driven searches. ⁸¹ But of course, in each of the three marijuana examples the method *and* the standard for probable cause are identical: a mechanical search assigns a fifty percent likelihood of finding drugs to every house searched. It is simply the *scale* of the search that drives the objections. ⁸² And in the faulty wiring example, the scale is the same as in the most extreme of the marijuana

- **80.** *See*, *e.g.*, State v. Smith, 344 N.W.2d 505, 508 (S.D. 1984); Gould & Stern, *supra* note 60, at 794 (discussing doctrine concerning multiple-location searches). This conclusion would of course be *incorrect* if probable cause requires more than a fifty-percent likelihood. *See infra* Part III.A & note 306 (citing cases suggesting that a search of both duplex units would be impermissible).
- 81. See infra notes 292-295 and accompanying text (discussing Camara v. Mun. Ct., 387 U.S. 523 (1967)). These programmatic searches are often inaptly described as "suspicionless searches." Chandler v. Miller, 520 U.S. 305, 308 (1997). The term "suspicionless," however, is meant to capture only the idea that these searches need not "be accompanied by some measure of individualized suspicion," as that concept is generally understood. Indianapolis v. Edmond, 531 U.S. 32, 41 (2000) (emphasis added). But as the discussion, supra notes 73-75 and accompanying text, clarifies, "individualization" is present in programmatic searches, because the targets always have some individual features that trigger the relevant profile – for example, being a house in a neighborhood whose structures have an identified risk of faulty wiring. Cf. Camara, 387 U.S. at 538 (holding "that 'probable cause'" for a particular building inspection will "exist" if preset "standards . . . are satisfied with respect to a particular dwelling," i.e., if a preset profile is met); id. (noting that such a profile could "be based upon the [age of the structure], the nature of the building . . . or the condition of the entire area"). The key probablecause question for Axis One is thus simply the likely rate of such violations within the target population - that is to say, the degree of suspicion that a target is violating the law. And far from being agnostic as to that likelihood, the Court's "special needs" and "administrative search" cases treat rates of success as integral to a programmatic search's validity. See Mich. Dep't of State Police v. Sitz, 496 U.S. 444, 454-55 (1990); Skinner v. Ry. Labor Execs.' Ass'n., 489 U.S. 602, 607 n.1 (1989); cf. Edmond, 531 U.S. at 48-51 (Rehnquist, C.J., dissenting). "Suspicionless searches," in short, care about suspicion – as it is captured in the relevant statistics.
- 82. See Cloud, supra note 62, at 852 (1985) (noting that the "difficulties" associated with searches and seizures "are compounded" when "a large number of innocent[s]" might be affected); see also Reid v. Georgia, 448 U.S. 438, 441 (1980) (per curiam) (rejecting a seizure premised on a profile that "describe[d] a very large category of presumably innocent travelers").

examples (every house in Brooklyn). Only the justification has changed—and with it, the search's constitutionality.

To be clear, the scale and nature of the intrusion and the justifications offered to support it are all considerations that can and should impact the constitutionality of a search or seizure. But they are concerns wholly independent of statistical methodology. Rather, questions of an intrusion's scale, nature, and justification affect the standard of proof to be applied to the government's claim, not the methodology by which to assess it. In other words, they go to the probable-cause inquiry's third axis, not its first. ⁸³ Objections to the probabilistic method grounded in a lack of so-called individualized suspicion thus simply miss the mark.

2. The Practical Critique

Apart from philosophical objections to the probabilistic method, a separate set of arguments contends that the method simply cannot be executed, or at least that it cannot be executed well. The claim here is generally twofold: that judges and lawyers lack the skills to engage in statistical reasoning and that, even if they had those skills, the requisite data would be too difficult to obtain.

The first of these concerns "is perhaps the oldest challenge to the use of overtly probabilistic evidence" in judicial decision-making. And yet, as I have noted elsewhere, "for every concern raised over judges' lack of empirical competency, there seems to be a countervailing sentiment that judicial engagement with empiricism 'is not rocket science'" and is well within the ken of lawyers and judges. Moreover, as judges' exposure to empirical data and empirical reasoning increases over time, the judicial competency objection will almost surely continue to erode. Each

Concerns regarding data quality and availability are more substantial, but they, too, are not overwhelming. For one thing, the clear trend in the criminal justice system (as in society more generally) is to collect and digitize more and

^{83.} See infra Part III.

^{84.} Minzner, supra note 41, at 952.

^{85.} Crespo, supra note 32, at 2104 n.240 (discussing the competency objection in detail).

^{86.} See id. at 2069-86, 2105 nn. 240-246, 2108-12 (discussing judicial training programs); cf. Tracey E. George, An Empirical Study of Empirical Legal Scholarship: The Top Law Schools, 81 IND. L.J. 141, 141 (2006) (describing empirical reasoning as "the next big thing in legal intellectual thought").

more systemic data.⁸⁷ While researchers and courts must guard against selection effects and other defects that can skew results, statistical science is sophisticated enough to mark the pitfalls to be avoided.⁸⁸ Courts, moreover, can take the quality of the data into account when assessing the evidentiary claims that the data claims to support.⁸⁹

Bearing these precautions in mind, an inescapable fact remains: the rise of programmatic and data-driven policing all but ensures that searches and seizures will increasingly fall into statistically recognizable and analyzable patterns. ⁹⁰ Indeed, it is precisely the patterned nature of these interactions that makes them feel like "scripts" in the first place. ⁹¹ The fact that police departments, lawyers, and courts are already mining caches of such data indicates that the quantity and quality of such scripts will likely improve over time.

Nor will courts be left adrift until the Big Data sea change is complete. On the contrary, judges have various tools to assess a thin script that lacks supporting data. Sometimes, they can estimate the relevant probabilities with enough accu-

- **87.** *See, e.g.*, Crespo, *supra* note 32, at 2069-2101; Grunwald & Fagan, *supra* note 58, 352-53 ("Historically, courts lacked access to the data needed to validate how police officers invoke Fourth Amendment factors in the field [But] that moment may be coming to an end.").
- 88. See, e.g., Simmons, supra note 13, at 982-83 ("Part of the solution thus involves correcting the data . . . [and using] different sources"); see also Ball, supra note 53, at 525 (noting the "great insights [that have come] from comprehensive data sets" that give "an accurate census of all stops"); Grunwald & Fagan, supra note 58, at 399-400 (noting that "high-definition body cameras" and "systematic social observation" techniques could help "validate the most common factors invoked by officers to establish reasonable suspicion"). As Aziz Huq aptly puts the point in a related context, we ought to insist on "a well-calibrated [statistical] decision" rather than valorizing the "flawed human decision-making" of the status quo. Aziz Z. Huq, A Right to a Human Decision, 105 VA. L. REV. (forthcoming 2020) (manuscript at 6). For examples of pitfalls to avoid, see Bernard E. Harcourt, Against Prediction: Profiling, Polic-ING, AND PUNISHING IN AN ACTUARIAL AGE 145-71 (2007) (describing a perverse "ratchet" effect that flows from mistakenly using arrest or conviction rates as proxies for offending rates); Ball, supra note 53, at 526-27 (noting challenges in defining a positive "hit" as well as those posed by "heterogeneity or hidden variables within populations that might drive the results"); Cloud, supra note 62, at 859 (describing the ratchet effect). See generally Crespo, supra note 32, at 2102 & n.232 (noting normative questions underlying probabilistic methodology).
- 89. Cf. Goldberg, supra note 53, at 824, 831-32.
- See Tracey L. Meares, Programming Errors: Understanding the Constitutionality of Stop-and-Frisk as a Program, Not an Incident, 82 U. CHI. L. REV. 159, 164 (2015).
- See Crespo, supra note 32, at 2072-74 (describing "probable-cause scripts" (citing Jeffrey Fagan & Amanda Geller, Following the Script: Narratives of Suspicion in Terry Stops in Street Policing, 82 U. CHI. L. REV. 51, 55 (2015))).

racy to resolve the case, either by extrapolating from other available data or by relying on reasonably bounded assumptions. ⁹² Alternatively, courts can specify grace periods within which they expect the government to produce the relevant data, after which unsupported probabilistic claims will no longer be deemed sufficient. ⁹³ Or, of course, courts can simply reject thin scripts that lack empirical support. After all, it is typically the state's burden in the Fourth Amendment context to substantiate its evidentiary claim – and to do so with evidence. ⁹⁴ Requiring statistical support for an inherently statistical claim thus simply insists upon the "facts" ⁹⁵ and "data" ⁹⁶ that the Fourth Amendment demands. To be sure, requiring such data burdens the state. But that objection is a truism: the Fourth Amendment expressly burdens law enforcement in order to safeguard civil liberty. ⁹⁷ Treating a lack of empirical data as grounds to *presume* that a given device or profile is accurate would thus be to abdicate the responsibility to *assess* the evidentiary claim at issue.

3. The Doctrinal Critique

Even if philosophical and practical objections to the statistical method are overcome, there remains what lawyers will likely consider the biggest remaining obstacle—namely, the Supreme Court's holding in *Florida v. Harris*. And yet, while *Harris* at first blush appears to be skeptical of quantitative reasoning, careful inspection reveals the opinion to quietly rely on the very statistical analysis that

- 92. Cf. Wayne R. LaFave, "Street Encounters" and the Constitution: Terry, Sibron, Peters, and Beyond, 67 MICH. L. REV. 39, 81 (1968) (offering an example of such reasoning in the context of courts assessing victim or witness profiles for a suspect in a known area); infra notes 116-123 and accompanying text (discussing United States v. Brignoni-Ponce, 422 U.S. 873 (1973) and Navarette v. California, 572 U.S. 393, 410 (2014) (Scalia, J. dissenting)).
- 93. *Cf.* Grutter v. Bollinger, 539 U.S. 306, 343 (2003) (remarking that, in the twenty-five years since "approv[ing] the use of race" in promoting student diversity in higher education, diversity "has indeed increased," and granting another twenty-five-year grace period, after which "the use of racial preferences [should] no longer be necessary"). Given the rapid march of digitization, *see supra* note 87 and accompanying text, probable-cause grace periods would likely be much shorter than the grace period in *Grutter*.
- 94. See Andrew Manuel Crespo, The Unavoidably Empirical Fourth Amendment: A Case Study of Kansas v. Glover, 1 CTs. & JUST. L.J. 217, 231-33 (2019).
- **95.** Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370 (2009) (quoting Brinegar v. United States, 338 U.S. 160, 175-176 (1949)).
- 96. United States v. Cortez, 449 U.S. 411, 418 (1981).
- 97. Cf. Arizona v. Hicks, 480 U.S. 321, 329 (1987) ("[T]here is nothing new in the realization that the Constitution sometimes insulates the criminality of a few in order to protect the privacy of us all.").

the Court purports to dismiss. Moreover, the Court has employed that same statistical mode of reasoning more openly in other cases predicated on thin scripts—just as the inherent epistemology of such cases requires. Indeed, the *Harris* Court's failure to follow suit offers one of the starker demonstrations in the Supreme Court's probable-cause canon of the pitfalls that can accompany an unexamined allegiance to probable cause unitarianism.

The question presented in *Harris* will by now be familiar: when determining whether an alert from a drug-sniffing dog provides probable cause to search a vehicle, must a court examine "the dog's performance in the field[] to establish the dog's reliability? ⁹⁸ The answer to that question, as multiple courts and scholars held prior to *Harris*, is that if the reliability of a mechanical search is to be assessed at all the device's *actual reliability* ought to be examined (rather than simply presumed adequate). This can be done by looking at how often the device correctly signals the presence of contraband when it is used in the field. Yet, the Court took the opposite view in *Harris*, in an opinion whose true holding requires some excavation, as it is tucked away at the end of a footnote that is in turn appended to a string of distracting arguments.

Those arguments include the somewhat true but legally irrelevant claim that records of a dog's field performance "may not capture [the] dog's false negatives," as well as the statistically backwards claim that "[t]he better measure of a dog's reliability... comes away from the field, in controlled testing environments." The defects in these arguments are significant. But they ought not

^{98.} Florida v. Harris, 568 U.S. 237, 240 (2013).

^{99.} *Id.* at 245. The Court is partially right: field data will not perfectly capture a dog's false negatives because the searches that uncover drugs will be less likely to occur if the dog never barks. Note, however, that *some* of those searches will still be conducted, typically incident to an arrest for some other offense. *See* Arizona v. Gant, 556 U.S. 332 (2009); South Dakota v. Opperman, 428 U.S. 364 (1976); cf. Atwater v. City of Lago Vista, 532 U.S. 318 (2001). If those searches reveal drugs that the dog missed, field data will capture those false negatives. More to the point, though, a dog's false negatives are simply irrelevant for Fourth Amendment purposes. The Fourth Amendment "protects individuals against unreasonable searches and seizures, not from searches and seizures that did not happen." Michael L. Rich, *Machine Learning, Automated Suspicion Algorithms, and the Fourth Amendment*, 164 U. PA. L. REV. 871, 918 (2016). A *police department*, to be sure, rightly cares about the number of drug couriers that its dogs fail to identify. But "the important number" for the *Fourth Amendment analysis* "is the false positives," that is to say, the number of searches that are conducted without an adequate factual basis — because the dog got it wrong. Richard E. Myers II, *Detector Dogs and Probable Cause*, 14 GEO. MASON L. REV. 1, 15 (2006).

^{100.} Harris, 568 U.S. at 246. The Fourth Amendment takes police practices as it finds them and thus cares about the reliability of the searches and seizures that police officers actually conduct—not some hypothetical set of searches or seizures that they might have conducted in a different or more controlled setting. As a result, the relevant question is "the probability the car contains"

detract from the central problem animating the Court's opinion, which is its fundamentally flawed conception of the core statistic driving probabilistic analysis — the false positive rate, which here would measure how often a dog incorrectly barks when contraband is *not* present.

As the Supreme Court acknowledges, a dog's false positive rate is the more "relevant" determinant of whether its bark offers a sufficiently reliable indication of contraband. 101 Yet the Court nonetheless views field performance data as an unreliable indicator of that essential false positive rate because such data "may markedly overstate a dog's *real* false positives." 102 The Court's definition of the phrase "real false positives," however, is where things start to come apart. For on the Court's view, a bark that incorrectly indicates the presence of drugs might not *really* be a false positive, because "the dog may have smelled the residual odor of drugs previously in the vehicle." 103 The Court, in other words, suggests that we should "not assume the dog has made an error" when its bark merely signals that a car *used* to conceal drugs, even though there are no drugs present *at the time of the search*. 104

This cannot be right. After all, the Court's own precedents make clear that the central question in the probable-cause analysis is whether there is a sufficient basis to believe that contraband "will be found in the place to be searched," which necessarily requires evidence sufficient "to justify a finding of probable

drugs conditional on (or in light of) the dog alert[ing]" at that car. Myers II, supra note 99, at 15 (emphasis added). Controlled testing removes that condition and thus fails to account for base rates within the population targeted by the police. See Ball, supra note 53, at 511; Goldberg, supra note 53, at 818-19. As Andrew Taslitz notes, this error can dramatically overstate the likelihood that a dog's signal will accurately indicate the presence of drugs in the field. See Taslitz, supra note 9, at 878 n.219 (noting that if a dog is accurate 99.8% of the time in controlled testing and is deployed in a population where one in 10,000 vehicles contains drugs, the dog will correctly alert once in 10,000 sniffs and will incorrectly alert twenty times (10,000 x 0.002) for an accuracy rate of only five percent). Controlled testing also fails to capture false positives introduced by the dog's handler, who could inadvertently (or intentionally) trigger the dog to bark when it shouldn't. See Goldberg, supra note 53, at 821; Rich, supra note 99, at 917.

- 101. Harris, 568 U.S. at 245 (describing the false positive rate as "more relevant" than the false negative rate).
- 102. Id. at 246 (emphasis added).
- 103. Id. at 245.
- 104. See id. at 245; see also id. at 246 n.2 ("A detection dog recognizes an odor, not a drug, and should alert whenever the scent is present, even if the substance is gone").
- 105. Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370 (2009) (emphasis added); accord Illinois v. Gates, 462 U. S. 213, 238 (1983).

cause *at that time*."¹⁰⁶ A device that confuses the presence of drugs with the absence of drugs is thus the literal definition of a device that is unreliable.¹⁰⁷ And indeed, in attempting to square this circle, the Court reveals its underlying probabilistic reasoning. For the Court does not ultimately reject the premise that what really matters is the presence of drugs at the time of the search. Rather, in a footnote, it simply asserts that dogs are unlikely to make such a mistake:

In the *usual case*, the *mere chance* that the substance might no longer be at the location does not matter; a well-trained dog's alert *establishes a fair probability*—all that is required for probable cause—that either drugs or evidence of a drug crime . . . will be found. ¹⁰⁸

This sentence quietly contains the true holding of the case. And it gives up the game. For what *is* the "chance" that the dog will alert correctly "in the usual case"? And how do we know that this "chance" rises to the level of a "fair probability"? Simply stating the question, in the Court's own language, reveals the fundamentally probabilistic nature of the inquiry. For unless one assumes the answer—that is to say, unless one simply accepts the dog's reliability without assessing it at all—there must be some way to *measure* the "chance" that the dog will make a mistake in "the usual case." And that measurement will reveal the "probability" that lies at the heart of the analysis—a probability that the *Harris* Court quietly treats as dispositive, all while rejecting the statistical data that would tell judges what that essential probability actually is. ¹⁰⁹

^{106.} Sgro v. United States, 287 U.S. 206, 210 (1932) (emphasis added).

^{107.} See Goldberg, supra note 53, at 822; Myers II, supra note 99, at 22 ("Perversely, the better the dog is at detecting trace amounts of the desired substance, the higher the likelihood that the dog will alert on trace amounts that are inadvertently present in materials owned by the innocent.").

^{108.} Harris, 568 U.S. at 246 n.2 (emphasis added).

[&]quot;up to snuff" if the dog participated "in a certification or training program." *Id.* at 246-48. Unfortunately, however, "there are no accepted standards for [such] training." Rich, *supra* note 99, at 917. The Court's proxy will thus be considerably less reliable than simply measuring a dog's actual success rate. Nor is the Court wise to assume that police departments will have a "strong incentive" to maximize their dogs' accuracy through such training regimens. *Harris*, 568 U.S. at 247. That assumption, after all, rests on the premise that the departments want to *limit* the number of searches they conduct in order to maximize efficiency. *See id.* But if the officers' true incentive is to *maximize* their search authority, they may well prefer dogs that bark as frequently as possible – given that, post-*Harris*, such a bark constitutes probable cause *per se.* Put another way, if a doctrinal regime treats a drug-sniffing dog as a *search-authorizing* device – rather than *testing* whether the dog is a reliable drug-sniffing device – an actor whose goal is to conduct searches may have an incentive to employ dogs that bark a lot, accurately or otherwise.

By contrast, the Court in other cases has been more willing to embrace the probabilistic reasoning that it attempted to resist in *Harris*. Consider three other thin-script cases that both predate and postdate *Harris*: *Maryland v. Pringle*, ¹¹⁰ *United States v. Brignoni-Ponce*, ¹¹¹ and *Navarette v. California*. ¹¹²

The first case in this trio, *Pringle*, presents a logical-circumstances script that will by now feel familiar. In that case, the police found three men in a car that had cocaine hidden in its armrest, in a location roughly equidistant and equally accessible to all three occupants. ¹¹³ Approaching this fact pattern on the assumption that only one of the three men in the car could be guilty of possessing the drugs, multiple Justices attempted to define the precise numerical threshold at which probable cause ceases (or begins) to exist. The inherently quantitative nature of that inquiry was captured well during oral argument, as the Justices pressed the government to distinguish between a fifty, thirty-three, twenty-five, twenty, and ten percent chance of arresting the right person. ¹¹⁴ Indeed, the Court

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110. 540 U.S. 366 (2003).
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114. Consider the following exchange:

Counsel: [In a] situation where you have, say, two people, only one of whom could be guilty of the crime . . . you still would have probable cause to arrest both.

Justice Scalia: But that's two people and here you've got three. What about three? . . . You can arrest all three?

Counsel: I think so.

Justice Scalia: What about five? You're going to arrest all five? . . . I mean, you know, it gets worse and worse . . . [A] ten percent chance, there are ten of them now—so the chance that any individual one did it is ten percent. That's still enough?

Counsel: I think we can't draw – the Court in *Gates* said that you cannot quantify probable cause. . . .

Justice Scalia: It doesn't mean probable[?]

Counsel: No, it does not mean probable. Clearly—

Justice Scalia: Why do we call it probable cause?

Counsel: . . . I think there's a bit of a misnomer there

Justice Stevens: But if you had to reduce it to a percentage figure, what would you call the percentage required for probable cause?

Counsel: I don't know that I could, Your Honor. . . .

Justice Stevens: But it's less than fifty, though, I gather?

Counsel: Yes

Justice Stevens: So that takes care of the two people in the room, but when you get down to 33-1/3 with three people? And with four people it would be twenty-five percent. Is that enough?

Counsel: Probably, probably.

^{111. 422} U.S. 873 (1975).

^{112. 572} U.S. 393 (2014).

^{113.} *Pringle*, 540 U.S. at 368 (2003); *cf. supra* note 50 and accompanying text (describing a scenario involving three occupants of a car stopped for drunk driving).

only managed to avoid deciding the case on strictly statistical grounds by rejecting the premise that just one of the three men could be guilty, and thus moving the case beyond the thin-script category altogether. 115 Absent that reframing, however, *Pringle*'s oral argument shows just how inescapable probabilistic reasoning is when a logical-circumstances thin script is at issue.

No such escape hatch was available in *United States v. Brignoni-Ponce*, ¹¹⁶ which offers perhaps the starkest example of statistical reasoning in the Supreme Court's probable-cause canon. Here, the Court considered whether the police can "stop a vehicle in an area near the border" on suspicion of smuggling activity "when the only ground for [such] suspicion is that the occupants appear to be of Mexican ancestry." This, of course, is a profile script that relies on an asserted correlation between smuggling activity and a trio of characteristics: driving a vehicle, the race of the driver, and being near the border. And while the particular profile at issue implicates challenging questions regarding the role that race might play in such analyses, ¹¹⁸ the Court ultimately rejected the seizure as unconstitutional for only one reason—the statistical weakness of the asserted correlation, as reflected in the following passage:

Large numbers of native-born and naturalized citizens have the physical characteristics identified with Mexican ancestry, and even in the border area a relatively *small proportion* of them are aliens. The *likelihood* that any given person of Mexican ancestry is an alien is [thus not] *high enough* to . . . justify stopping all Mexican-Americans to ask if they are aliens. ¹¹⁹

The Court then underscored the statistical nature of its analysis by citing census figures, which showed that in border states at that time, the percentage of people "of Mexican origin" who were "registered as aliens" was between 8.5% and 20.4%. ¹²⁰ Drawing on those statistics, the Court concluded that Mexican appearance is insufficiently correlated with being an immigrant – let alone an undocumented immigrant or a smuggler – to support the seizure at issue.

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Justice Breyer: Probably.
(Laughter)

Transcript of Oral Argument at 13-14, Pringle, 540 U.S. 366 (No. 02-809).

115. See Pringle, 540 U.S. at 372.
116. 422 U.S. 873 (1975).
117. Id. at 876.
118. See supra notes 74-75 and accompanying text.
119. 422 U.S. at 886-87 (emphases added).
120. Id. at 886 n.12.
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Finally, consider one of the Court's most recent probable-cause precedents, *Navarette v. California*.¹²¹ Here, the government advanced a profile that was not racially loaded. Rather, it simply claimed that a "discrete instance of irregular or hazardous driving," such as a single swerve, "generates a reasonable suspicion of ongoing intoxicated driving" and thus authorizes stopping a vehicle on suspicion of drunk driving.¹²² A majority of the Court invoked expressly probabilistic reasoning to regard this one-swerve profile as sufficient justification for stopping the vehicle, holding that such "erratic behaviors are *strongly correlated* with drunk driving."¹²³ The dissenters, meanwhile, disagreed on equally probabilistic grounds, citing, with Justice Scalia's characteristic panache, the utter lack of empirical foundation for the majority's assertion:

What proportion of the hundreds of thousands—perhaps millions—of careless, reckless, or intentional traffic violations committed each day is attributable to drunken drivers? *I say 0.1 percent*. I have no basis for that except my own guesswork. But *unless the Court has some basis in reality* to believe that the *proportion* is many orders of magnitude above that—say *1 in 10* or at least *1 in 20*—it has *no grounds* for its unsupported assertion that the tipster's report in this case gave rise to a reasonable suspicion of drunken driving. ¹²⁴

Taken together, these examples – along with the excavation of *Harris*'s underlying logic – show that probabilistic and statistically grounded analyses are essentially inescapable when thin scripts are at issue, no matter how mightily a court may strive to avoid them. ¹²⁵ Of course, the key difference in *Harris* is that the Court there downplays the relevance of (and denies defendants access to) the very empirical data required to answer the central probabilistic question at hand. What might explain this odd and significant tension in the Court's reasoning?

The answer can be gleaned from the opinion's closing passage:

The test for probable cause is not reducible to "precise definition or quantification." . . . [Rather,] a probable-cause hearing focusing on a dog's

^{121. 134} S. Ct. 1683 (2014).

^{122.} *Id.* at 1695 (Scalia, J., dissenting) (emphasis omitted) (characterizing the government's claim).

^{123.} *Id.* at 1691 (majority opinion) (emphasis added).

^{124.} Id. at 1695 (Scalia, J., dissenting) (emphasis added and omitted).

^{125.} For additional examples of cases in which the Court openly embraces statistical reasoning when assessing thin scripts, see *supra* note 81, which discusses the Court's expressly probabilistic assessment of "programmatic searches" under the administrative-search and specialneeds doctrines.

alert should proceed *much like any other*.... In all events, the court should not prescribe, as the [lower court here] did, an inflexible set of evidentiary requirements. The question—*similar to every inquiry into probable cause*—is whether all the facts surrounding a dog's alert, *viewed through the lens of common sense*, would make a reasonably prudent person think that a search would reveal contraband or evidence of a crime.¹²⁶

A crisper articulation of probable cause unitarianism is hard to come by: a single "test" governs "every inquiry into probable cause," such that each case must be examined "much like any other."

The Court's unexamined adherence to this unitarian idea forced it to assess an inherently probabilistic case through a decidedly unhelpful lens—to try to reject statistical reasoning in a case where such reasoning would not only have been helpful but was ultimately inescapable. Note, however, what would have followed from a contrary approach. If the Court had required that dog sniffs be supported by field data capturing each dog's success rate, the unavoidable next question would have been: what numerical success rate establishes probable cause? That looming question might explain Harris's curious reasoning, as the Court may have simply balked at offering an answer, fearful that it could not sensibly reduce all of probable cause to a single number that would govern every case.

There is wisdom in that reluctance. Probable cause cannot, and should not, be reduced to a single number that governs every case, nor should the statistical method be extended to all probable cause analyses. Indeed, if one were to choose a single method for assessing all evidentiary claims—as the *Harris* Court assumed it had to do—it is not clear that the statistical method ought to win the day. In this one key respect, *Harris* was partially right, notwithstanding its various other missteps. But as the preceding discussion of thin scripts makes clear, *Harris* was also partially—and significantly—wrong: sometimes, the *only* way to examine probable cause is to look to the statistical probabilities at hand. The Court's inability to see that its rejection of the statistical method might be both partially right and partially wrong is precisely the problem.

B. Narrative Mosaics and the Qualitative Method

To say that the *Harris* Court was partially right to reject the statistical method is to accept that a "flexible, common-sense" approach to assessing evidentiary

126. Florida v. Harris, 568 U.S. 237, 243, 247-48 (2013) (emphasis added) (citation omitted).

claims is appropriate at least some of the time. ¹²⁷ This Section defends that proposition against those who consider such an approach anathema. The defense, however, is a qualified one. It embraces a (revised) version of the holistic, totality-of-the-circumstances approach but only when that approach is essentially unavoidable – that is to say, in cases presenting narrative mosaics. ¹²⁸

Simply put, a narrative mosaic is a story. It paints a picture in words of a target's alleged implication in criminal behavior. Examples of such stories abound. ¹²⁹ Unlike thin scripts, no two such stories are the same – and that makes an important difference. For while a given set of mechanical searches or profiles are similar enough that they can be aggregated together and assessed statistically, the statistical method "gives us no understanding of how probability can be applied to the assessment of a single unique event." ¹³⁰ Narrative mosaics must therefore be assessed entirely on their own terms, holistically and qualitatively, such that the essential question becomes whether the story offered to support the search or seizure hangs together well enough to make the target's implication seem sufficiently likely – even if we cannot quantify that likelihood. ¹³¹

To its critics, this qualitative mode of assessment is a formless "non-methodology"¹³² that "fails to 'structure' [the probable-cause] analysis for the

^{127.} Id. at 240 (quoting Illinois v. Gates, 462 U.S. 213, 239 (1983)).

^{128.} *Cf.* United States v. Arvizu, 534 U.S. 266, 275 (2002) (referring to "the factual 'mosaic' analyzed [in] a reasonable-suspicion determination").

^{129.} See, e.g., United States v. Ventresca, 380 U.S. 102, 104 (1965); see also infra Appendix (documenting uses of narrative mosaics).

^{130.} Yablon, *supra* note 40, at 909; *see also* Taslitz, *supra* note 9, at 899. Unitarian proponents of the probabilistic method disagree. *See* Underwood, *supra* note 40, at 1423 (describing such theorists); *supra* note 41. But as Barbara Underwood explains, this argument rings false, for unlike a decision-maker applying the probabilistic method, a qualitative "decision[-]maker is not committed in advance of decision to the factors that will be considered [or to] the rule for combining them"; rather, she "is free to respond to individual differences whose relevance was not anticipated" by any particular probabilistic script. Underwood, *supra* note 40, at 1423. "[The] power to respond to individual differences [thus] may render [qualitative] judgments either better or worse than statistical decisions . . . [but] the distinction between the methods cannot be dismissed as unimportant." *Id.*

^{131.} See Gould & Stern, supra note 60, at 789-90 ("[I]t might be feasible to assess the plausibility of the . . . story, but it will be difficult, if not impossible, to measure its probability with exactitude."). As Charles Yablon explains, "[I]ndividuals, and especially lawyers and judges, often make probability statements regarding the outcome of unique individual events" (for example, "this lawsuit has a 70% likelihood of success"). Yablon, supra note 40, at 910. But these statements reflect only a "subjective concept of probability"; it captures the speaker's "degree of rational belief" but is "not empirically verifiable." *Id*.

^{132.} Bacigal, supra note 9, at 793.

trained legal mind."¹³³ Worse still, it invites inconsistent and potentially biased subjective judgments and ultimately offers too weak a check on law-enforcement authority. ¹³⁴ In short, the method's alleged main defects are subjectivity, inconsistency, and undue deference.

Each of these critiques has some merit. Together they caution against any hasty or overeager application of a method grounded in what Justice Benjamin Cardozo once colorfully called a "doctrine of the hunch." But the simple fact remains that narrative mosaics cannot really be assessed in any other way. And the qualitative method—properly cabined—offers a legitimate mode of conducting that assessment. To appreciate why, consider the method's three principal critiques in turn.

1. The Subjectivity Critique

Any criticism of the qualitative method as inherently subjective must come to terms with the subjectivity that inheres in *any* expert judgment. Indeed, while the Supreme Court often describes its holistic probable-cause analysis as an application of "common sense," the adjective "common" is misleading here, as it downplays the method's fundamental reliance on professional expertise. Epistemologists more faithfully refer to the qualitative method as the "clinical method," a term meant to evoke the thought processes of physicians, psychologists, and (yes) lawyers, who routinely deploy expert judgment when making predictions and decisions. We routinely "put [our] faith in the subjective assessments of [these] knowledgeable observers," even though they are not always able to articulate every incremental step of their thought process with

^{133.} Joseph D. Grano, *Probable Cause and Common Sense: A Reply to the Critics of Illinois v. Gates*, 17 U. MICH. J.L. REFORM 465, 466 (1984).

^{134.} See supra note 13 and infra Sections I.B.1-2; see also Illinois v. Gates, 462 U.S. 213, 290 (1983) (Brennan, J., dissenting) (describing "commonsense" in this context as "code... for an overly permissive attitude towards police practices in derogation of the rights secured by the Fourth Amendment"); Craig S. Lerner, Reasonable Suspicion and Mere Hunches, 59 VAND. L. REV. 407, 415 (2006) ("To a great extent, the current legal regime merely substitutes palliative euphemisms for useful controls on a police officer's discretion.").

^{135.} Benjamin N. Cardozo, *Jurisprudence*, *in* SELECTED WRITINGS OF BENJAMIN NATHAN CARDOZO 27 (Margaret E. Hall ed., 1947).

^{136.} Florida v. Harris, 568 U.S. 237, 248 (2013); see also id. (tying inquiry to a "reasonably prudent person"); Terry v. Ohio, 392 U.S. 1, 27 (1968) ("reasonably prudent man"); cf. Rudovsky & Harris, supra note 60, at 504 ("The Court instructs us to take a nontechnical, everyday lay person's common sense view of the facts").

^{137.} See, e.g., Simmons, supra note 13, at 988; Underwood, supra note 40, at 1422.

^{138.} Yablon, *supra* note 40, at 903.

logical precision.¹³⁹ The foundation for that faith is the fact that such experts employ a decidedly *uncommon* sense, a "trained intuition."¹⁴⁰

Of course, judges may sometimes issue judgments that reflect subjective whim or caprice, even impermissible bias. ¹⁴¹ Existing evidence, however, gives reason to be confident that, in the mine-run, judges employ their professional judgment in a way that allows them to resist the common biases and heuristics of lay decision-makers. ¹⁴² This should not be surprising. After all, if the fundamental objection is that judges are so irredeemably biased as to render them inherently unreliable or illegitimate decision-makers, then the Fourth Amendment—and the rest of the legal system—faces bigger problems than a muddled probable-cause jurisprudence. ¹⁴³ This is not to deny that a given judge's prior experiences, judicial philosophy, and biases could impact how she assesses a narrative mosaic. ¹⁴⁴ But the nature and the norms of the profession suggest that the mere existence of such subjectivity is not a sufficient reason to drive qualitative judgments out of the probable-cause inquiry, even if doing so were possible.

- **139.** See Lerner, supra note 134, at 411 (describing an expertise so "hard-wired that it is not easily summoned and articulated").
- **140.** Roscoe Pound, *The Theory of Judicial Decisions*, 36 HARV. L. REV. 940, 951 (1923); see also KARL LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS 268 (1960) (describing lawyers' "situation sense").
- See Benjamin Levin, Values and Assumptions in Criminal Adjudication, 129 HARV. L. REV. F. 379, 384-86 (2016).
- 142. See Dan M. Kahan et al., "Ideology" or "Situation Sense"? An Experimental Investigation of Motivated Reasoning and Professional Judgment, 164 U. PA. L. REV. 349, 355 (2016). But see Holger Spamann & Lars Klöhn, Justice Is Less Blind, and Less Legalistic, than We Thought: Evidence from an Experiment with Real Judges, 45 J. LEGAL STUD. 255, 268-73 (2016).
- 143. See Crespo, supra note 32, at 2111-14 ("[I]f skeptics are right in their denial of criminal court judges' good faith or intentions... that suggests a problem that is concededly larger than [doctrinal reforms'] capacity to resolve."); Underwood, supra note 40, at 1430 (noting that the qualitative method depends upon "a specialized group of people entrusted with the power to decide" and that the "perceived legitimacy" of the method thus depends upon the extent to which "these people inspire general respect and confidence").
- 144. Cf. Andrew Manuel Crespo, Regaining Perspective: Constitutional Criminal Adjudication in the U.S. Supreme Court, 100 MINN. L. REV. 1985, 1997 (noting the role that "antejudicial experience bears on one's judicial outlook"). Notably, courts are in a position to monitor their own decisions with an eye toward detecting and combatting impermissible biases. See Crespo, supra note 32, at 2101 n.227 ("[S]ystemic factfinding could permit criminal courts to turn their attention inward to examine, for example, racial disparities . . . in their own . . . decisions."); cf. Alma Cohen & Crystal Yang, Judicial Politics and Sentencing Decisions (Nat'l Bureau of Econ. Research Working Paper No. 24615, May 2018), https://www.nber.org/papers/w24615.pdf.

2. The Consistency Critique

Still, subjective judgments, including expert judgments, will by their very nature not always be consistent—hence the medical profession's famed "second opinion." Inconsistency, however, is not fatal to the method's usage in the probable-cause context. For one thing, in a great many cases, it should not be too difficult to determine whether a given narrative mosaic supports a search or seizure, as the facts will point clearly in one direction or the other. ¹⁴⁵ In those cases, there is every reason to believe that trained judicial actors will be able to assess a mosaic *accurately*—and thus consistently.

There will, of course, be hard cases. And a perhaps uncomfortable feature of the qualitative method is that, in those cases, the word "accuracy" begins to lose its meaning, for there is simply no way to say for certain that one experienced clinician's qualitative prediction is more or less accurate than another's. ¹⁴⁶ The absence of a clear right answer, however, does not automatically render any subsequent decision capricious or illegitimate. For while the qualitative method is not always definitive, it is always amenable to rational and public explication. And that public reasoning can in turn offer not only its own source of legitimacy but also the opportunity for a shared discourse to emerge, allowing different judicial actors to strive for internal, albeit imperfect, coherence among their decisions. ¹⁴⁷ Indeed, common-law adjudication, by its very nature, relies on such reasoned professional judgment to achieve *rough* consistency across hard cases *over time*—not perfect consistency immediately. Judged by that standard, the qualitative method holds up. ¹⁴⁸

^{145.} For an example of a straightforward mosaic that nearly all judges would deem sufficient, see *Locke v. United States*, 11 U.S. (7 Cranch 339), 347 (1813) (Marshall, C.J.) ("If these [seized] goods have really paid [the required import taxes], it is peculiarly unfortunate that they should have been shipped without certificates of that fact, under fictitious names, from a port where they were not entered, and that the marks of the packages should have been changed."). For one that clearly falls short, see *Henry v. United States*, 361 U.S. 98, 103-04 (1959).

^{146.} See Yablon, supra note 40, at 911 ("[T]he fact that two individuals disagree strongly about a probability judgment creates no inconsistency.").

^{147.} See Taslitz, supra note 9, at 878 ("[S]ubjective judgments can be critiqued based on standards of rational inference and adequacy of evidence."); Yablon, supra note 40, at 911-12. On the connection between reason giving and legitimacy, see Tom R. Tyler, Procedural Justice, Legitimacy, and the Effective Rule of Law, 30 CRIME & JUST. 283 (2003).

^{148.} *Cf.* Brett M. Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2120 n.12 (2016) ("[W]e should not expect all judges to agree on whether a particular kind of search is 'reasonable' under the Fourth Amendment Cases such as those . . . are less a matter of pure interpretation than of common law-like judging.") (reviewing ROBERT A. KATZMANN, JUDGING STATUTES (2014)).

3. The Deference Critique

The final criticism of the qualitative method is perhaps the most substantial, as it suggests that the method produces systematically biased results. The concern here is that the method invites judges to defer to the judgments of law-enforcement officers—the very actors whose conduct the Fourth Amendment is designed to constrain—and thus skews the probable-cause inquiry toward state interests at the expense of individual freedom. This criticism contains two distinct strands, which we need to disentangle and address separately.

Some critics fear that judges might hide their personal law-and-order tendencies behind the qualitative method's veil of vagueness, exploiting the method's facial indeterminacy to issue decisions that may be normatively suspect. 149 Relatedly, some fear that the method's vagueness will make it hard for police officers to predict what conduct might later be deemed impermissible, which could in turn make judges "reluctant to second-guess" the police, even when they think the police have acted unlawfully. 150 Both of these concerns, however, are variants of the earlier and broader concern that judges will not fulfill their basic duty to examine challenged police action with sufficient independence, neutrality, and vigor. 151 And as before, the honest response is that this concern is simultaneously warranted and yet not so severe as its most ardent proponents suggest. Rather, as I have previously written, when it comes to "the hard normative task of weighing liberty and security with a balanced regard for each," criminal court judges operate within a professional tradition that "at least aspires" to check "the security apparatus of the state," which by contrast tends to "favor only one half of the liberty-security question." ¹⁵² Judges tasked with administering the Fourth Amendment may not "have always struck the balance between these competing value systems perfectly," but no fair assessment can seriously contend they have altogether abandoned the effort. 153

The concern that judges will *unduly* defer to law-enforcement interests, however, should be distinguished from a separate and distinct fear, expressed by

^{149.} See, e.g., Taslitz, supra note 9, at 874-75.

^{150.} LaFave, *supra* note 92, at 70; *cf. infra* notes 248-254 and accompanying text (discussing the value of clear doctrine to law enforcement).

^{151.} See supra Section I.B.1; cf. infra note 340 (rejecting the notion that officers have a personal stake in the outcomes of searches or seizures).

^{152.} Crespo, supra note 32, at 2061-62.

^{153.} Id.

some scholars, that the qualitative method permits judges to defer to law-enforcement actors at all. ¹⁵⁴ For judicial deference to law-enforcement actors is not inherently improper when viewed through the lens of the qualitative method's core epistemology. On the contrary, deference may sometimes be required. After all, if the central premise of the qualitative approach is that certain evidentiary claims require us "to put our faith in the subjective assessments of knowledgeable observers," ¹⁵⁵ then we cannot ignore the substantial expertise that the police themselves may have when it comes to predicting or sensing criminal activity. ¹⁵⁶ Indeed, the very fact that law-enforcement officers and judges both have a claim to expertise in this arena exposes the true methodological question that narrative mosaics pose: not *whether* to rely on professional expertise when assessing such claims but rather *whose* expertise should predominate – the officer who executes the search or seizure, or the judge who reviews it?¹⁵⁷

Crucially, that question itself need not have a single answer. ¹⁵⁸ A given of-ficer's entitlement to deference derives from the officer's own experiences and biases, which, like any claim of expertise, will inevitably vary from one (purported) expert to the next. ¹⁵⁹ The relevance of the officer's individual experience in that assessment ought to be self-evident. Experts, after all, are made, not born. Thus, while "a veteran officer well 'versed in the field of law enforcement' may be able to reach conclusions that would 'elude an untrained' judge or layperson,"

- 154. See, e.g., Dripps, supra note 12, at 944 ("Deterrence considerations . . . counsel against indulging deference to police judgment about legality of police action."); Dworkin, supra note 16, at 344 ("A definition of probable cause which turns on the perceptions of reasonable police officers is no standard at all").
- 155. Yablon, supra note 40, at 903
- 156. See Joseph G. Cook, *Probable Cause to Arrest*, 24 VAND. L. REV. 317, 318 (1971) ("[P]olice, by virtue of their experience and expertise, may be able to identify certain activities as indicative of criminal behavior that might not appear so to a judge."); Lerner, *supra* note 134, at 413 ("Police officers, like corporate executives, doctors, and even judges, get better at what they do with time; . . . they develop a . . . 'sixth sense' [that] proves invaluable in the field.").
- 157. See Grano, supra note 133, at 510 ("[D]etermining who should decide whether an arrest or search will be made is more important than deciding the post-arrest or post-search question of whether probable cause existed."); Yablon, supra note 40, at 941 ("[T]he real question is when to trust experts ").
- 158. Just as crucially, the question here is different from the question whether the officer is a reliable narrator of the factual claim underlying a given search or seizure. That question is the core Axis Two inquiry taken up *infra* Section II.B. Here, by contrast, the focus is on the officer's potential expertise in *assessing* a given set of facts which, for purposes of the Axis One inquiry, we assume to be true.
- **159.** *Cf.* Yablon, *supra* note 40, at 941 (arguing that an expert's "subjectivity, uncertainty, and cognitive biases may play a dominant role in [her] opinions" and that "[t]he question is one that must be decided case-by-case").

that same expert judgment may just as well "elude' the rookie police officer or one without specialized training or experience." Similarly, when it comes to assessing bias, some officers may be hyper suspicious, to the point that they misread innocuous scenarios as involving criminal activity, a bias that would inevitably skew their probable-cause assessments. 161

Determining whether a given officer's training and experience actually afford her a degree of expertise that outweighs any countervailing biases—and that exceeds the judge's own expertise—will not always be easy. ¹⁶² In view of that challenge, applying a uniform presumption of law-enforcement expertise—and thus uniform deference to law-enforcement officers—may seem to be the easy road. ¹⁶³ But such an approach is supported by neither logic nor doctrine. As to

- 160. Kit Kinports, Veteran Police Officers and Three-Dollar Steaks: The Subjective/Objective Dimensions of Probable Cause and Reasonable Suspicion, 12 U. PA. J. CONST. L. 751, 761 (2010). Note that "police training and experience [can] cut both ways," insofar as "some circumstances might actually seem less suspicious to a highly trained officer than to an inexperienced one." Id. at 760-61; see also LaFave, supra note 92, at 70-71.
- 161. Some observers see this bias as endemic to policing itself. See, e.g., United States v. Montero-Camargo, 208 F.3d 1122, 1143 (9th Cir. 2000) (en banc) (Kozinski, J., concurring) ("Just as a man with a hammer sees every problem as a nail, so a man with a badge may see every corner of his beat as a high crime area."); MARK BAKER, COPS: THEIR LIVES IN THEIR OWN WORDS 175 (1985) ("[P]olice officers . . . just don't trust the people they police – which is everybody who is not a cop."); JEROME H. SKOLNICK & DAVID H. BAYLEY, COMMUNITY POLICING: ISSUES AND PRACTICES AROUND THE WORLD 49-50 (1988) (describing police officers' "perception of danger" as "typically magnified" when compared to actual threats); cf. LaFave, supra note 92, at 87 ("The police are frequently cautioned to assume that every person encountered may be armed "). Officers may also have an incentive to exaggerate their expertise. Cf. Underwood, supra note 40, at 1430-33 (noting the potentially "territorial" incentive that "an entrenched group of [experts] may have . . . [to] preserv[e] their discretionary powers"). And of course, some officers may be biased (implicitly or explicitly) against certain targets with respect to characteristics – like race – that are only peripherally related to bona fide grounds of suspicion, or are not related at all. See supra note 74. In addition to their inherent harms, those biases can also skew officers' probable-cause judgments.
- 162. See Kinports, supra note 160, at 762 (describing "the notion of police training and experience" as "amorphous"); cf. Seth Stoughton, The Legal Framework for Evidence Based Policing in the US, in EVIDENCE BASED POLICING: AN INTRODUCTION 41, 47 (Renée J. Mitchell & Laura Huey eds., 2018) ("[A] substantial amount of police training is simply not empirically valid."); Craig S. Lerner, Comment on Max Minzner, Putting Probability Back into Probable Cause, 87 Tex. L. Rev. 57, 58 (2009) ("Seniority is a weak proxy for skill.").
- 163. Cf. Amsterdam, supra note 1, at 394 ("If there are no fairly clear rules telling the policeman what he may and may not do, courts are seldom going to say that what he did was unreasonable."); Kinports, supra note 160, at 761 ("[C]ourts seem to use the officer's training and experience only as a 'plus' factor bolstering the government's [case] "); Stoughton, supra note 162, at 48. For a detailed account of the rise of judicial deference to law enforcement's claimed expertise, see Anna Lvovsky, The Judicial Presumption of Police Expertise, 130 HARV. L. REV. 1995, 1999 (2017).

logic, "a necessary corollary' of allowing the prosecution to cite" an officer's purported expertise in support of its claim "is that defendants should likewise be able to rely on [the] absence [of such experience or expertise] in challenging police intrusions." ¹⁶⁴ As for doctrine, the Supreme Court has consistently held that law-enforcement deference depends on the officer's "experience and specialized training," ¹⁶⁵ and requires facts demonstrating the existence of such experience and training. ¹⁶⁶

A coherent and faithful doctrine of probable cause would center these questions of deference and the relative expertise of law enforcement and judges in the assessment of narrative mosaics. In some cases, the government will provide information sufficient to warrant deference. In others, it will not. The key point, though, is a pluralist one: "deference is not an all or nothing proposition." ¹⁶⁷

In sum, true narrative mosaics defy statistical analysis. They must therefore be assessed by a more holistic, intuitive, and qualitative approach that relies on the expertise of judges and (perhaps) law-enforcement actors. This approach is not nearly so disastrous as its sharpest critics contend. But we cannot fully refute concerns over its inherent subjectivity and potential for biased, inconsistent results. The method thus ought not stand as the *sole* mode of probable-cause analysis in all cases, as the Supreme Court insists and as some prominent scholars propose. ¹⁶⁸ Rather, just as the statistical method is appropriate only in its own

^{164.} Kinports, *supra* note 160, at 761 (quoting Reeves v. State, 599 P.2d 727, 742 n.44 (Alaska 1979)).

^{165.} United States v. Arvizu, 534 U.S. 266, 273 (2002); see also Ornelas v. United States, 517 U.S. 690, 700 (1996); United States v. Cortez, 449 U.S. 411, 419 (1980); Brown v. Texas, 443 U.S. 47, 52 n.2 (1979).

^{166.} See, e.g., Ornelas, 517 U.S. at 700 (noting that the officer "had searched roughly 2,000 cars for narcotics"); Florida v. Rodriguez, 469 U.S. 1, 3 (1984) (per curiam) (emphasizing that the officer "had received about 40 hours of narcotics training in the police academy," had undergone "a 5-week course from the Organized Crime Bureau," and "had received further training under the auspices of the Drug Enforcement Administration"); United States v. Mendenhall, 446 U.S. 544, 564 (1980) (Powell, J., concurring in part) (noting that officers "had 10 years of experience and special training in drug enforcement"); Terry v. Ohio, 392 U.S. 1, 5 (1968) (emphasizing that the officer "had been a policeman for 39 years and a detective for 35"). Lower courts seeking to emulate the Supreme Court's close examination of an officer's claimed expertise might borrow a page from the statistical method's book. See Lerner, supra note 134, at 416 ("What if... we abandoned the current euphemism-laden system and adopted, in effect, something closer to a statistical, quality control regime?"); Minzner, supra note 41, at 932 ("If some officers are simply more capable at identifying incriminating information than others, they will have different probabilities of success despite appearing equally competent to a magistrate.").

^{167.} Bowers, *supra* note 2, at 1027 (considering deference in the context of officers' equitable discretion).

^{168.} See, e.g., Kerr, supra note 41, at 143.

domain, so too the qualitative method should be limited to the assessment of narrative mosaics, where it appropriately operates as an important component of probable cause's analytic framework—not the entirety of that framework.

C. Mixed(-Up) Claims

The ability to distinguish between thin scripts and narrative mosaics carries us a long way toward resolving the methodological dispute between the probabilistic and qualitative methods, the key debate animating Axis One of probable cause's framework. Before turning to the second axis, however, it is worth considering cases that either straddle or blur the boundary between thin scripts and narrative mosaics. Such cases require us to combine the two methods or to choose between them. As explained below, combining the methods is appropriate when thin scripts and narrative mosaics are mixed *together* in a single case. Choosing one method over the other, by contrast, is appropriate when a narrative mosaic is mixed *up* with – that is to say, mistaken for – a thin script, or vice versa.

1. Mixed Claims

Sometimes, an evidentiary claim will crisply and discretely present a thin script as part of a broader narrative mosaic. A drug-sniffing dog, for example, might have only a thirty-percent success rate in the field but might alert along-side a car driven by someone who is sweating profusely and is unable to offer a coherent account of where he is headed. In considering whether a search of such a target is permissible under the Fourth Amendment, the most natural approach is to apply the statistical and qualitative methods to their respective components of the claim.

That, to be sure, is a more complex endeavor than performing either method alone. But it hardly calls for a mindboggling feat of mental gymnastics. ¹⁷⁰ Indeed, in many cases, one component of the claim may predominate over the other, such that the reviewing judge can conserve mental energy by focusing on the load-bearing and potentially dispositive aspect of the claim, while relegating the secondary analytic method to a supporting role. For example, in the hypothetical of the drug-sniffing dog and the sweating man, the dog's hit rate could

^{169.} For an example of a mixed claim, see United States v. Sharpe, 470 U.S. 675, 677 (1985), which combines a profile about vehicles used in smuggling operations with a narrative mosaic involving a high-speed chase.

^{170.} Note that the analysis at issue is to be performed by the judge assessing the case—it need not be performed by the officer at the time of a given search or seizure, for the reasons explained infra text accompanying notes 333-346.

be "used as an anchor," with a subjective assessment of the sweating man's suspicious behavior "adjusting from the anchor upward or downward." As a doctrinal matter, the propriety of such double-barreled reasoning is less than clear, as Supreme Court opinions both criticize and employ this approach. Purely as an epistemological matter, however, mixed evidentiary claims are not particularly puzzling. They simply call for a mixed analytic method.

2. Mixed-Up Claims: Faux Thin Scripts

In contrast to evidentiary claims that mix thin scripts and mosaics together, some cases "mix up"—or confuse—one type of evidentiary claim for the other. Consider first a set of qualitative claims that masquerade as thin scripts, as occurs whenever the government makes an expressly probabilistic *argument* in support of a given search or seizure but fails to specify the defining characteristics of its (purported) thin-script with sufficient specificity or consistency.

The once prominent "drug courier profile" is a good example of this problem. In their heyday, the government relied on such profiles to stop individuals at airports and other locations, but the testimony from government agents "concerning the profile's composition . . . varied from case to case." Such inconsistency stymies the probabilistic method, as one cannot measure the efficacy of a profile unless one knows what the profile entails. Recognizing as much, however, also points to the two ways in which this problem can be redressed. First, courts can press the government to specify the profile's defining characteristics and to proffer supporting data. Second, if the government cannot or will

^{171.} Taslitz, *supra* note 9, at 878 n.223; *see id.* at 878-79 (describing the "middle ground where objective data may be" combined with "subjective assessment"); *see also* Goldberg, *supra* note 53, at 794-95; Simmons, *supra* note 13, at 1012.

^{172.} Compare United States v. Sokolow, 490 U.S. 1, 1, 6 (1989) (reversing a lower court that "divided the facts bearing on reasonable suspicion into two categories," one pertaining to probabilistic evidence and the other to more case-specific evidence), with United States v. Brignoni-Ponce, 422 U.S. 873, 884-85 (1975) (describing a mix of probabilistic and qualitative considerations that might be considered together in a single analysis).

^{173.} Cloud, *supra* note 62, at 846 (criticizing courts for failing "to require a specific definition or to agree upon the behavioral characteristics comprising the profile"). *Compare* United States v. Mendenhall, 446 U.S. 544, 547 n.1 (1980) (plurality opinion) (enumerating four elements of "the so-called 'drug courier profile"), *with* Florida v. Royer, 460 U.S. 491, 493 n.2 (1983) (enumerating six elements of the profile, none of which match the elements in *Mendenhall*), *and* Reid v. Georgia, 448 U.S. 438, 440 (1980) (enumerating four elements of the same "so-called" profile, only one of which matches the elements in *Mendenhall* and none of which match the elements in *Royer*).

^{174.} See Cloud, supra note 62, at 869 ("Defining the profile is a prerequisite to interpreting its impact.").

not take that approach, judges can permit it to abandon the pretense that the profile tends to show anything at all. Such a concession would not concede the ultimate impropriety of the underlying search or seizure. But it would require the government to admit that its claim is essentially a narrative mosaic, which should be evaluated "on its facts without regard to claims that the defendant's behaviors are suspicious *because* they conform to a profile."¹⁷⁵ For when a faux thin script is at issue, they do not. The government, in other words, cannot have it both ways. If it claims that its search or seizure is supported by statistical probabilities rather than a mere "hunch," it must come forward with the relevant data to back up that claim. ¹⁷⁶

3. Mixed-Up Claims: Thick Scripts

Finally, the decision as to whether to apply a qualitative or probabilistic method can also get confounded from the opposite direction: The government may sometimes present a case as a narrative mosaic and disclaim any reliance on statistical reasoning or support, but the *court* may view the proffered narrative as the latest installment in a series of familiar fact patterns.¹⁷⁷ In such circumstances, the judge may view the case as essentially a "thick script" – a replicable probabilistic script masquerading behind a mosaic façade.

As a conceptual matter, this scenario presents some challenging epistemological questions that arise where statistical judgments and qualitative judgments blur together. As Charles Yablon explains, these "hard cases" mark a zone in which both statistical and qualitative evidence "are potentially relevant" and "where theory provides no satisfactory answer" as to which method applies. ¹⁷⁸ Rather, the choice of method in these boundary cases ultimately presents a policy

^{175.} *Id.* at 881 (emphasis added). Notably, this was essentially the approach that the Supreme Court took with the drug-courier profile, which it came to view as no more than an "informal compilation of characteristics." *Reid*, 448 U.S. at 440; *see also Royer*, 460 U.S. at 525-27 n.6 (Rehnquist, J., dissenting) (describing "[t]he 'drug courier profile'" as a tool to help law enforcement decide when "further investigation is appropriate," not "a mathematical formula" that "establishes grounds" for a search or seizure).

^{176.} See Crespo, supra note 94 (describing Kansas v. Glover, 139 S. Ct. 1445 (2019), a case in which the government advances an inescapably statistical claim unsupported by any empirical evidence).

^{177.} Cf. Crespo, supra note 32 (describing courts' ability to recognize patterns across cases).

^{178.} Yablon, supra note 40, at 934.

question that turns on the relative costs and accuracy of the competing approaches, given the facts at hand. 179

Fortunately, the horizon where this choice arises is easier to describe than to reach. At present, criminal courts eschew statistical analysis even when the most straightforward statistical claims are at issue. There is thus ample runway to employ and hone the statistical method before it bumps up against the more challenging cases that might force a difficult choice between statistical and qualitative methodologies. And encouragingly, that horizon of hard cases could well remain in the distance even as the statistical method gets underway, as the class of cases amenable to statistical analysis will inevitably increase as judges develop their facility and familiarity with such assessments. At some point, hard questions may arise concerning how much of probable cause's first axis should be delegated to algorithms, machine learning, and the like. But fear of such far-off questions ought not forestall probable cause pluralism—or its partial endorsement of statistical reasoning—in the here and now. Rather, the probable-cause inquiry should be statistical where it is inherently probabilistic, and only in those cases.

II. AXIS TWO: ASSESSING CLAIM-PROPONENT CREDIBILITY

Thus far, we have assumed that the facts in a given evidentiary claim are true and have focused on how to assess the inferences drawn from those facts. But, in the memorable words of Justice Douglas, we still need to ask: "are these 'facts' really facts?" That question lies at the heart of probable cause's second analytic axis, which addresses the credibility of the evidentiary claim's *proponent*, rather than the inference drawn from the facts she presents. For as the Supreme Court

^{179.} See id. at 914-15 ("The question for policymakers is . . . whether . . . estimates of prior probabilities and likelihood functions are more valid and reliable than direct estimates . . . considering all known facts").

^{180.} See Underwood, supra note 40, at 1429 ("The gap between intuitive individualized judgment and statistical inference may in time be narrowed[] [a]s education in statistics becomes more pervasive[and] statistical reasoning . . . more familiar to all decisionmakers "); see also Minzner, supra note 41, at 941 (noting that one "effect of a success-rate requirement will be [greater] data generation").

^{181.} For thoughtful explorations of these still far-off challenges, see Huq, *supra* note 88, at 15-18; Rich, *supra* note 99, at 872-73 (discussing predictive algorithms); Simmons, *supra* note 13, at 993 (same).

^{182.} United States v. Ventresca, 380 U.S. 102, 118 (1965) (Douglas, J., dissenting).

rightly observes, "any reliance upon factual allegations necessarily entails some degree of reliance upon the credibility of the source." ¹⁸³

When it comes to assessing that credibility in the Fourth Amendment context, the Supreme Court insists on a single approach that should now be familiar: "in determining [a claim proponent's] overall reliability," a judge should "make a practical, common-sense decision" that considers "all the circumstances." 184 Indeed, the seminal case extolling a holistic, common-sense approach to the probable-cause inquiry is an Axis Two case: *Illinois v. Gates.* 185 In that case, a witness told the police that the eventual defendants "[p]resently... have over \$100,000 worth of drugs in their basement," an assertion of a primary and ultimate fact that would unquestionably establish sufficient grounds for a search of the defendants' basement—*if it is true.* 186 Thus, the central challenge, both conceptually and in the Court's opinion, was figuring out how to determine the reliability of the witness who made the claim. That "task," according to the Court, is accomplished "simply" by applying the judge's "practical, commonsense judgment" to the "totality of the circumstances." 187

In adopting this intuitive methodology, the *Gates* Court invoked both the fear of factual complexity and the unitarian assumption that such complexity is an inescapable feature of every probable-cause analysis. Witnesses' claims, the Court explained, "*like all other clues and evidence* . . . may vary greatly in their value and reliability." ¹⁸⁸ But instead of entertaining a pluralist answer to all of this factual diversity, the *Gates* Court held fast to its unitarian commitment—rejecting "[o]ne simple rule [to] cover every situation" while nonetheless insisting on one single, hazy standard. ¹⁸⁹

To be sure, the Court's concern over factual complexity is not without merit. Anyone can be a witness, and no two people are the same. "One simple rule" thus really can't "cover every situation," as no fixed jurisprudential formula can

^{183.} Jaben v. United States, 381 U.S. 214, 224 (1965).

^{184.} Illinois v. Gates, 462 U.S. 213, 233, 238 (1983).

^{185. 462} U.S. 213 (1983).

^{186.} *Id.* at 225. For further discussion of *Illinois v. Gates*, see *infra* notes 265-268 and accompanying text. The word "unquestionably" in the text deserves some modest qualification, for the reasons set forth *infra* Section III.C (discussing polar cases in which searches or seizures may be deemed to violate the Fourth Amendment, even when there is absolute certainty that the target is in fact implicated in the alleged criminal misconduct).

^{187.} Gates, 462 U.S. at 238, 241 (hyphens omitted).

^{188.} Id. at 232 (emphasis added) (quoting Adams v. Williams, 407 U.S. 143, 147 (1972)).

^{189.} *Id.* (quoting Adams v. Williams, 407 U.S. 143, 147 (1972)); *see id.* ("Rigid legal rules are illsuited to an area of such diversity.").

mechanically assess the reliability of each unique individual.¹⁹⁰ And yet, just as was true of narrative mosaics, there are downsides to relying solely on a judge's intuition to assess witnesses' reliability.¹⁹¹ For one thing, it is not clear that judges are particularly good at intuitively assessing witnesses' reliability, at least without some further guidance aimed at counteracting ill-founded heuristics.¹⁹² For another, there is the familiar fear of inconsistency across judges, which one encounters with some frequency when speaking to practitioners in this arena. Finally, and perhaps most significantly, there is a concern of undue deference—a fear that some witnesses are transparently not credible, but that judges balk at calling those witnesses liars (or worse, *perjurers*) based solely on a hunch.¹⁹³

In short, a maximally "flexible, easily applied standard" has some virtues. ¹⁹⁴ But it risks undermining the accuracy, consistency, and legitimacy of judges' credibility decisions. A sound jurisprudence of probable cause should do better. But, to do so, it must first reject the false choice between "one simple rule to cover every situation" and one simple, maximally flexible standard to govern every case. Instead, probable cause's second axis should provide a conceptual structure that guides courts in their credibility assessments, while maintaining their flexibility to tailor those assessments in individual cases. ¹⁹⁵

This Part will show that such an alternative approach is possible. It proceeds from three foundational insights. First, the universe of Fourth Amendment

^{190.} Id. (quoting Adams v. Williams, 407 U.S. 143, 147 (1972)).

^{191.} See supra Sections I.B.1-3.

^{192.} See Leif A. Strömwall & Pär Anders Granhag, How to Detect Deception? Arresting the Beliefs of Police Officers, Prosecutors and Judges, 9 PSYCHOL. CRIME & L. 19, 31 (2003) (reporting, based on a survey of judges in Sweden, that "judges' perceptions of how different factors relate to deception are remarkably inconsistent with the results stemming from studies investigating actual cues to deception"); see also id. at 20 ("Despite . . . empirical findings[] suggesting it is possible to discriminate between liars and truth-tellers, the deception detection accuracy has not been found to be remarkable. Most studies report a hit rate (the percentage of correct veracity judgments) of just over the level of chance.") (citing ALDERT VRIJ, DETECTING LIES AND DECEIT (2000)); cf. Note, The Province of the Jurist: Judicial Resistance to Expert Testimony on Eyewitnesses as Institutional Rivalry, 126 HARV. L. REV. 2381, 2386 (2013) (reporting that "statistical and sociological evidence has confirmed that juries are woefully incompetent at evaluating eyewitness testimony").

^{193.} See infra Section II.B (discussing the persistent problem of police perjury); cf. Scalia, supra note 13, at 1180-82 (discussing the relationship between maximally flexible standards and a deficit in "judicial courage").

^{194.} Gates, 462 U.S. at 239.

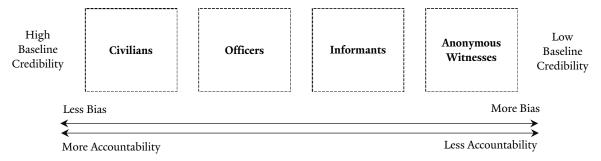
^{195.} Cf. H. Richard Uviller, Credence, Character, and the Rules of Evidence: Seeing Through the Liar's Tale, 42 DUKE L.J. 776, 776 (1993) (describing judicial factfinding more generally as, in part, an effort to devise "a structured process for the determination of the credibility of strangers, many of whom will, for one reason or another, try to deceive those who rely upon their word").

claim proponents can be divided into a manageably discrete and comprehensive set of categories. Second, witnesses in each of those categories have categorically distinct *credibility baselines*, such that, all things considered, a judge should be more skeptical of certain types of witnesses than of others. Finally, courts can account for these divergent credibility baselines—and can thread the needle between rigid legal rules and maximally flexible standards—by linking each type of claim proponent to a corresponding, though not necessarily dispositive, *presumption* of credibility or incredibility.

As with Axis One, these insights can be organized into a helpful visual schematic.

FIGURE 2.

AXIS TWO: CLAIM PROPONENTS, ORGANIZED BY BIAS & ACCOUNTABILITY



This figure's basic descriptive claim is twofold. First, as the *Gates* Court itself briefly acknowledges, evidentiary claims "come . . . from many different *types* of persons." Indeed, it is possible to sort every potential claim proponent into one of four discrete categories: civilian witnesses, law-enforcement officers, confidential informants, and anonymous witnesses. 197

Second, and crucially, these four categories of claim proponents can be organized into a credibility hierarchy along two related and parallel axes. These axes

^{196.} Gates, 462 U.S. at 232 (emphasis added).

^{197.} See infra Sections II.A-D (discussing each category). This Article is not the first to taxonomize Fourth Amendment claim proponents. See LaFave, supra note 92, at 76-84; Rich, supra note 99, at 907; Simmons, supra note 13, at 1011-12; Jessica Ward, Note, Do the Clothes Make the Man? Implications of a Witness' Status in the Determination of Probable Cause, 28 FORDHAM URB. L.J. 2005, 2006 (2001). Indeed, the Supreme Court itself at times embraces such a categorical approach. See, e.g., Adams v. Williams, 407 U.S. 143, 146-47 (1972) (employing categorical analysis to compare types of claim proponents); cf. United States v. Harris, 403 U.S. 573, 600 (1971) (Harlan, J., dissenting) (same).

correspond to the likelihood that witnesses in each category will be *biased or untruthful* when presenting their testimony and the likelihood that they will be held *accountable* for any false testimony that they might offer. Thus, claim proponents located at the left-hand pole of Figure 2 have relatively low bias and relatively high accountability, while those at the far other extreme have relatively high risks of bias and low accountability. Taken together, these variables capture Axis Two's core concern: the possibility that the facts constituting an evidentiary claim "might have been fabricated." And, combined, they form a credibility baseline for each witness category, with witnesses at the leftmost pole boasting the highest baseline credibility and those at the opposite pole suffering from the lowest. ¹⁹⁹

These divergent baselines arise in part because different types of witnesses have different relationships to the people whom they might implicate in criminal behavior.²⁰⁰ But they also arise because the legal system has varying means of

198. Harris, 403 U.S. at 592; see Uviller, supra note 195, at 813 ("[N]early all people [who] choose to lie on the witness stand [do so] according to two determinants: the importance to them of having a falsehood believed [i.e., bias] and their confidence that their false testimony will achieve that end with minimal [personal] risk [i.e., accountability]."). It is this focus on fabrication that distinguishes human claim proponents from drug-sniffing dogs or other thinscript producing machines: reliability is essential in both contexts, but unlike human witnesses, neither the dog nor the machine ever "means to deceive." GEORGE FISHER, EVIDENCE 377 (3d ed. 2013) (emphasis added). Of course, fabrication is not the only potential defect with human testimony. See Laurence H. Tribe, Triangulating Hearsay, 87 HARV. L. REV. 957, 958 (1974) (describing "the four testimonial infirmities of ambiguity, insincerity, faulty perception, and erroneous memory") (citing Edmund Morgan, Hearsay Dangers and the Application of the Hearsay Concept, 62 HARV. L. REV. 177, 178 (1948)); cf. Elizabeth F. Loftus, Eyewitness Testimony, 33 APPLIED COGNITIVE PSYCHOL. 498 (2019) (cataloging potential defects with eyewitness perception and memory). Fabrication is, however, uniquely concerning, to the point that the law – like this Article – regularly treats distinguishing "liars from truthtellers" as "the crucial matter" in the factfinding process. Uviller, supra note 195, at 780; see, e.g., Davis v. Alaska, 415 U.S. 308, 316-17 (1974) (describing "the exposure of a witness' motivation in testifying [a]s a proper and important function of the constitutionally protected right of crossexamination" (citing Greene v. McElroy, 360 U.S. 474, 496 (1959))); Greene v. McElroy, 360 U.S. 474, 496 (1959) (describing the importance of guarding against unreliable testimony from witnesses "who, in fact, might be perjurers or persons motivated by malice, vindictiveness, intolerance, prejudice, or jealousy").

199. Cf. Erik J. Girvan et al., The Propriety of Peremptory Challenges for Perceived Personality Traits, 37 LAW & PSYCHOL. REV. 49, 64 & n.85 (2013) (conceptualizing a "credibility model" in which "overall credibility" depends on various "elements," including "baseline credibility"). Note that the claim here is not that lack of accountability causes bias, or vice versa. Rather, it is simply the descriptive (and inductive) claim that the universe of potential claim proponents currently comprises four categories of witnesses whose accountability and risk of bias follow the identifiable pattern set out above.

200. See infra Sections II.A-D.

holding such claim proponents accountable for false testimony. In ordinary adjudication, the primary mechanism for such accountability is familiar: witnesses testify under oath and are cross-examined.²⁰¹ These tools are not entirely foreign to the Fourth Amendment.²⁰² But because the Supreme Court permits evidentiary claims to be presented secondhand, a claim's *true* proponent need not appear before the judge deciding whether to suppress evidence or to issue a warrant.²⁰³ Those true proponents could thus escape questioning altogether and may accordingly avoid any liability if their claim was a lie. Moreover, even among those claim proponents who *do* present sworn testimony to a judicial officer, some – most notably, police officers – may not face any *genuine* accountability if they testify falsely.

In short, bias and accountability can vary across different types of claim proponents in identifiable and categorical ways. Building on that premise, the remainder of this Part explains the relative position that each category of claim proponent occupies within the hierarchy of credibility baselines. Two additional points, however, bear emphasis. First, the normative claim here is relative, not absolute: a group of claim proponents does not become *inherently* incredible at some point along the axis, such that members of that group can never offer evidence sufficient to support a constitutionally valid search or seizure. Rather, Axis Two indicates only that certain groups of claim proponents have weaker credibility baselines than others—and that for any given evidentiary claim, it should therefore be *more difficult* to establish probable cause if the proponent of that claim is situated further to the right on the axis above. The question of "how credible is credible *enough*?" is a separate one, taken up by probable cause's third axis.²⁰⁴

Second, the framework offered here is not intended to dictate a rigid conclusion about a witness's credibility based solely on where that witness falls on the axis. On the contrary, the very idea of a credibility baseline is intended to suggest

^{201.} See California v. Green, 399 U.S. 149, 158 (1970) (describing such "cross-examination [as] the 'greatest legal engine ever invented for the discovery of truth'" (quoting 5 J. WIGMORE, EVIDENCE 1367 (3d ed. 1940)); see also Hoffa v. United States, 385 U.S. 293, 311 (1966) (noting that the "safeguards of the Anglo-American legal system leave the veracity of a witness to be tested by cross-examination").

^{202.} Cf. U.S. CONST. amend. IV (requiring assertions of probable cause to be "supported by Oath or affirmation"); Nancy Leong, *Making Rights*, 92 B.U. L. REV. 405, 421-29 (2012) (observing that the Fourth Amendment is primarily enforced through adversarial suppression hearings that include an opportunity for cross-examination).

^{203.} See United States v. Raddatz, 447 U.S. 667, 679 (1980).

^{204.} See infra Part III.

a starting point for the credibility inquiry—a doctrinal presumption that a witness's credibility is relatively weak if she has a low baseline and relatively strong if she has a high baseline. As with any presumption, however, the judge should accept this starting premise "unless it is overcome by contravening evidence."²⁰⁵ One of the parties, for example, might point to unique or idiosyncratic aspects of a particular claim proponent that alter the analysis. Alternatively, the government might offset an adverse presumption against a certain class of witnesses by bolstering the accountability mechanisms for that given category. Or the government might simply challenge the empirical premises of the baselines themselves, presenting evidence that certain categories of witnesses are in fact more reliable than the discussion here suggests.²⁰⁶

The framework offered here thus differs from earlier and more rigid doctrinal regimes that treated a witness's identity as destiny, and which the Supreme Court rightly rejected.²⁰⁷ But while this approach leaves room for flexible and intuitional case-by-case assessments, it just as crucially *structures* those assessments by channeling them into a coherent conceptual framework. In so doing, it helps to construct a Fourth Amendment law of credibility—one that the Supreme Court, for all its invocations of the "totality of the circumstances," has never actually foreclosed.²⁰⁸ On the contrary, the Court's existing probable-cause

^{205.} GRAHAM C. LILLY ET AL., PRINCIPLES OF EVIDENCE § 12.2, at 425 (8th ed. 2019).

^{206.} The primary point is thus that a mode of analysis *along the lines* presented here is possible, valuable, and desirable. The actual positioning of the categories is an empirical question, with answers that can change over time as facts develop or emerge. The contingency (and thus adaptability) of the hierarchy is a feature, not a bug, and does not undermine its value.

^{207.} Cf. FISHER, supra note 198, at 364 (describing the disappearance of a "broad array of competency rules" that "labeled certain [classes of] witnesses liars as a matter of law"). Between 1964 and 1983, probable-cause jurisprudence experimented with a rigid framework for assessing witness reliability. See Spinelli v. United States, 393 U.S. 410 (1969); Aguilar v. Texas, 378 U.S. 108, 114 (1964). Lower courts elaborating on that doctrine constructed "an elaborate body of law [that] was largely a muddle," William J. Stuntz, Warrants and Fourth Amendment Remedies, 77 VA. L. Rev. 881, 929 (1991), and that "ultimately brought the whole structure down," Wald, supra note 13, at 88. A central flaw of that approach, however, was its unitarian aspiration to create a single analytic method that could be applied to every potential claim proponent—precisely the aspiration that the model offered here rejects. See Dworkin, supra note 16, at 348-50; Grano, supra note 133, at 469 (criticizing the Aguilar-Spinelli test for "rigidly requiring the same degree of trustworthiness in all circumstances").

^{208.} While *Gates* has come to stand for the idea that a "common sense" approach should govern every probable-cause inquiry, *see*, *e.g.*, Florida v. Harris, 568 U.S. 237, 240 (2013), the opinion itself left the door open to a middle path in which the credibility assessment is grounded in generalizable principles less rigid than the *Aguilar-Spinelli* doctrine came to be. *See supra* note 207; *see also* Alabama v. White, 496 U.S. 325, 328 (1990) ("[T]hose factors that had been considered critical under *Aguilar* and *Spinelli* . . . remain 'highly relevant in determining the value of [a claim proponent's] report."); Illinois v. Gates, 462 U.S. 213, 240 (1983) (noting that

canon contains the seeds of the approach offered here, as will become apparent as we flesh out the four categories set forth above.

A. Civilians

The first category of claim proponents describes witnesses who are, presumptively, the most credible: civilians. To see why, consider these witnesses' defining features: they identify themselves to law enforcement and report facts suggesting some criminal act but are not otherwise connected to law enforcement and do not expect anything of value from law enforcement in return for their information. In other words, civilian witnesses are a group of people who have every outward indication of "acting in the best interests of society," out of "no motive but public service" and "good citizenship." Their baseline risk of bias, in short, is low.

And yet, notwithstanding that low risk of bias, civilian witnesses are also held more accountable for false claims they might offer than any other type of claim proponent. This accountability will rarely take the form of cross-examination under oath, as civilian witnesses rarely testify at suppression hearings or in warrant applications. They are, however, subject to robust statutes that criminalize making false criminal reports. Peccently termed "penalty of felony" statutes, these false-reporting statutes have the same practical effect as perjury statutes. In both instances, a false allegation of criminality can land the person

- 209. Walker v. State, 196 So. 2d 8, 12 (Fla. Dist. Ct. App. 1967).
- 210. People v. Saars, 584 P.2d 622, 626 (Colo. 1978).
- 211. People v. Schulle, 124 Cal. Rptr. 585, 588 (Ct. App. 1975).
- 212. See John F. Decker, The Varying Parameters of Obstruction of Justice in American Criminal Law, 65 LA. L. REV. 49, 98-101 (2004) (surveying false reporting statutes); Ariel C. Werner, Note, What's in a Name? Challenging the Citizen-Informant Doctrine, 89 N.Y.U. L. REV. 2336, 2362 (2014) (noting "the ubiquity of laws creating civil and criminal penalties for malicious prosecution and false reporting").
- 213. See Randall D. Eliason, Mark Judge Signed a Letter "Under Penalty of Felony." Yes, That's Really a Thing, Wash. Post (Sept. 30, 2018, 3:58 PM EDT), https://washingtonpost.com/opinions/a-new-legal-phrase-emerged-from-the-kavanaugh-hearings/2018/09/30/83333cd8-c4b7-11e8-9b1c-a9of1daae309_story.html [https://perma.cc/N5S5-HKXT] (describing this "unusual legal phrase," coined "during the Supreme Court confirmation process for Judge Brett M. Kavanaugh," as an "accurate way to characterize" the similar criminal liability that can attach to both lying to law enforcement officers and to testifying falsely under oath).

[&]quot;magistrates remain perfectly free to exact such assurances as they deem necessary . . . [when] making probable-cause determinations"); cf. Wayne R. LaFave, Fourth Amendment Vagaries (of Improbable Cause, Imperceptible Plain View, Notorious Privacy, and Balancing Askew), 74 J. CRIM. L. & CRIMINOLOGY 1171, 1195 (1983) (urging "trial and appellate courts . . . not [to] read Gates as a total abandonment of standards and rules of law").

who made it in prison. And, importantly, while statistics are hard to come by, there is good reason to think that civilians who make false statements to law enforcement are "very frequently prosecuted," indicating that this accountability mechanism is "not an empty gesture." ²¹⁵

Given civilian witnesses' low bias and high accountability, courts frequently (and fairly) treat them as presumptively credible evidentiary-claim proponents. In fact, lower courts sometimes give this general practice a formal name: the "citizen-informant doctrine." Though a somewhat inartful phrase, the doctrine captures the basic insight suggested here: civilian witnesses have the highest possible baseline credibility and thus the strongest entitlement to a presumption of credibility in the probable-cause analysis. To be sure, that presumption could be overcome by case-specific factors that suggest a given civilian might be biased or incredible. But absent such red flags, an evidentiary claim advanced by a civilian deserves more credence than if it were advanced by anyone else.

^{214.} Susan Hennessey & Helen Klein Murillo, *The Law of Leaks*, LAWFARE (Feb. 15, 2017, 3:44 PM), https://www.lawfareblog.com/law-leaks [https://perma.cc/MUN2-8CEG] (discussing 18 U.S.C. § 1001).

^{215.} People v. Hicks, 341 N.E.2d 227, 230 (N.Y. 1975) (describing a state-level statute).

^{216.} See Rich, supra note 99, at 909 ("[C]ourts are willing to trust [civilian witnesses] because they are presumed to have no reason to lie and can be punished if they falsely report a crime.").

^{217.} E.g., People v. Glaubman, 485 P.2d 711, 714-17 (Colo. 1971) (adopting "the citizen-informer rule"). See generally Werner, supra note 212 (surveying and criticizing the doctrine). The doctrine would more aptly be titled the "civilian witness" doctrine as it applies to civilians who are not "citizens" and applies so long as the so-called "informant" is not affiliated with law enforcement (contrary to the colloquial usage of the term "informant"). See infra Section III.C; see also 1 LAFAVE, SEARCH & SEIZURE § 3.3(a), at 122.

^{218.} See Riddle v. State, 275 N.E.2d 788, 793 (Ind. 1971) ("Certainly, not all alleged victims are credible sources of information. The malicious or spiteful pointing out of another person as a criminal without basis in fact is not unknown to our society."); see also United States v. Elmore, 482 F.3d 172, 180 (2d Cir. 2007) (applying a presumption of veracity to civilian witnesses "in the absence of special circumstances suggesting that they should not be trusted"); State v. Roybal, 232 P.3d 1016, 1022 (Utah 2010) (noting that "personal involvement between the [witness] and the suspect [could lead] to a possibility of bias and fabricated allegations"). This Article brackets a question over whether law enforcement should have a duty to seek out such contraindicators prior to executing a search or seizure. Compare Simmons, supra note 13, at 991-93 (describing prevailing doctrine as rejecting such a duty), with Draper v. United States, 358 U.S. 307, 321 n.7 (1959) (Douglas, J., dissenting), Hebron v. Touhy, 18 F.3d 421, 423 (7th Cir. 1994), Filer v. Smith, 55 N.W. 999, 1001-02 (Mich. 1893), and State v. Bauer, 991 P.2d 668, 671 (Wash. Ct. App. 2000) (applying the civilian-witness rule only if the police "interview the [witness] and ascertain such background facts as would support a reasonable inference that he is prudent or credible, and without motive to falsify" (internal quotation marks omitted)).

B. Officers

In an ideal world, one would expect law-enforcement officers—entrusted with the power of the state and tasked with upholding the law—to have an even higher credibility baseline than civilians. Those who study and work in the criminal justice system know that reality is more complicated. As the Supreme Court has long observed, law-enforcement officers are not neutral actors when it comes to executing or attempting to justify searches and seizures. Rather, to quote Justice Jackson, they are "zealous[ly]... engaged in the often competitive enterprise of ferreting out crime." The targets of searches and seizures, in other words, are people whom the police see themselves as competing *against*—an inherent bias that, while not necessarily a criticism, is nonetheless an important fact of life. 220

This institutional bias does, however, sometimes yield a problem worthy of criticism in the context of the probable-cause analysis: law-enforcement officers have been known to offer false testimony to courts in an effort to prop up challenged searches and seizures. As Morgan Cloud observes, "empirical studies on the subject suggest that [such] perjured testimony is common" and "that police officers commit perjury most often to avoid suppression of evidence and to fabricate probable cause." The phenomenon is widely recognized by prosecutors, defense attorneys, and even by police officers themselves, who have coined a disturbing portmanteau for the practice: "testilying." 222

^{219.} Johnson v. United States, 333. U.S. 13, 14 & n.3 (1948).

^{220.} *Cf.* Crespo, *supra* note 32, at 2061 (arguing that officers' zeal is natural, as "it is uniquely their responsibility to keep society safe").

^{221.} Morgan Cloud, *The Dirty Little Secret*, 43 EMORY L.J. 1311, 1312 (1994); *see also* Christopher Slobogin, *Testilying: Police Perjury and What to Do About It*, 67 U. Colo. L. Rev. 1037, 1041 (1996) ("Whether it is conjecture by individual observers, a survey of criminal attorneys, or a more sophisticated study, the existing literature demonstrates a widespread belief that [police perjury] is a frequent occurrence." (citations omitted)); Irving Younger, *The Perjury Routine*, The NATION, May 8, 1967, at 596-97 ("Every lawyer who practices in the criminal courts knows that police perjury is commonplace.").

^{222.} Joe Sexton, New York Police Often Lie Under Oath, Report Says, N.Y. TIMES, Apr. 22 1994, at A1 (quoting a government report describing police perjury as "the most widespread form of police wrongdoing facing today's criminal justice system," and explaining that "[t]he practice . . . is prevalent enough in the department that it has its own nickname: 'testilying.'"); see also Joseph Goldstein, "Testilying" by Police: A Stubborn Problem, N.Y. TIMES (Mar. 19, 2018), https://www.nytimes.com/2018/03/18/nyregion/testilying-police-perjury-new-york.html [https://perma.cc/X6K5-CVQU] (plus ça change).

Scholars tend to assume that such testilying is a natural outgrowth of the institutional biases that Justice Jackson described.²²³ But if those biases are the motive for police perjury, lack of accountability creates the opportunity. As Christopher Slobogin notes, police officers are "seldom made to pay for their lying" by prosecutors, who may worry about not being able to convict all of the offending officers or about the implications of trying to do so.²²⁴ Officers thus tend to "think they can get away" with testilying, and they are usually right.²²⁵

Taken together, officers' higher risks of bias and lower accountability for false statements suggest that they should have a comparatively lower baseline credibility than their civilian counterparts. This "does not mean that all police officers lie under oath, or that most officers lie, or even that some officers lie all the time." Courts should thus not apply a *blanket* presumption of incredibility to all officers. Indeed, in the absence of specific red flags, officers may merit a presumption of credibility as strong as civilian witnesses. Put, given the concerns described above, courts should be cautious before applying such a presumption—and should be ready to reject it if they learn of problems concerning a given police officer or department. Put they are problems concerning a given police officer or department.

Just as importantly, when judges do identify such problems, they have an opportunity and an obligation to respond—by insisting that the government bolster its officers' weak credibility baseline with some alternative accountability mechanism. Courts are uniquely well positioned to insist on such mechanisms, and to view law-enforcement testimony with heightened skepticism until such

^{223.} See Cloud, supra note 221, at 1313; Grano, supra note 2, at 408-11; Carol S. Steiker, Second Thoughts About First Principles, 107 HARV. L. REV. 820, 853-54 (1994).

²²⁴. Slobogin, *supra* note 221, at 1045-47.

^{225.} Id.; see also Myron W. Orfield, Jr., Deterrence, Perjury, and the Heater Factor: An Exclusionary Rule in the Chicago Criminal Courts, 63 U. COLO. L. REV. 75, 107 (1992) (reporting a survey showing eighty-nine percent of prosecutors were aware of perjury but did not prevent it); Joseph Goldstein, Promotions, Not Punishments, for Officers Accused of Lying, N.Y. TIMES (Mar. 20, 2018), https://www.nytimes.com/2018/03/19/nyregion/new-york-police-perjury-promotions.html [https://perma.cc/J44D-9YFU] (describing officers who were promoted after having been found to have presented false testimony, including one who "was accused by two federal judges of testifying falsely").

^{226.} Cloud, supra note 221, at 1313.

^{227.} *Cf.* Bush v. United States, 375 F.2d 602, 604 (D.C. Cir. 1967) (Burger, J.) ("[I]t would be a dismal reflection on society to say that when the guardians of its security are called to testify in court under oath, their testimony must be viewed with suspicion The cure for unreliable police officers is not to be found in such a shotgun approach.").

^{228.} *Cf.* Crespo, *supra* note 32, at 2077-78 & n.121 (suggesting courts may already have "much of the information necessary to determine whether their local police departments" or officers have "credibility concerns"); Slobogin, *supra* note 221, at 1045 ("Many . . . judges believe perjury is systematic and often suspect it is occurring in individual cases.").

measures are implemented successfully.²²⁹ Indeed, the very fact that such judicial responses operate at a categorical level may make it easier for judges to acknowledge that a problem exists in the first place. Judges, after all, need not declare any *one* officer a liar or a perjurer in order to respond to an *institutional* problem that may be staring the court in the face.²³⁰

Judges can resort to a range of potential responses to such problems. They might, for example, treat an officer's evidentiary claim as relatively more credible if it is set out in a warrant application submitted before any challenged search or seizure occurs—and thus before the officer is in a position to lie about what the search will uncover.²³¹ Courts might alternatively insist that an evidentiary claim offered by an officer with a weak credibility baseline be independently corroborated, either by a second witness or by objective evidence from body-worn or dashboard cameras.²³² Courts could also insist that a department identified as

- 229. The Foreign Intelligence Surveillance Court recently took action along these lines in response "to reports that [law enforcement] personnel . . . provided false information" to judges tasked with approving searches. *In re* Accuracy Concerns Regarding FBI Matters Submitted to the FISC, No. Misc. 19-02, slip op. at 1 (FISA Ct., Dec. 17, 2019), https://www.fisc.uscourts.gov/sites/default/files/MIsc%2019%2002%20191217.pdf [https://perma.cc/MSG8-GEJS]. In that case, the court ordered the government to "inform the Court in a sworn written submission of what it has done, and plans to do, to ensure that the statement of facts in each FBI application accurately and completely reflects information possessed by the FBI." *Id.* at 3-4. And the court further held that until such remedial measures were implemented, the government would be required to offer "an explanation why . . . the information in FBI applications submitted in the interim should be regarded as reliable." *Id.* at 4.
- **230.** *Cf.* Cloud, *supra* note 221, at 1323-24 ("Judges simply do not like to call other government officials liars—especially those who appear regularly in court. It is distasteful; it is indelicate; it is bad manners.").
- 231. See Oren Bar-Gill & Barry Friedman, Taking Warrants Seriously, 106 Nw. U. L. Rev. 1609, 1651-52 (2012) (describing warrants as "structurally more resistant to and deterrent of police perjury"); Stuntz, supra note 207, at 915-17. In United States v. Ventresca, 380 U.S. 102 (1965), the Court held that "a search under a warrant may be sustainable where without one it would fall." Id. at 106. "The Ventresca principle has now been overshadowed" in appellate courts by the good-faith doctrine, which largely exempts warrant-based searches from the exclusionary rule (regardless of whether the warrant was actually premised on probable cause). 2 LAFAVE, SEARCH & SEIZURE § 3.1(c), at 552. But for trial-level judges deciding whether probable cause is present in the first instance, Ventresca can and should be invoked to bolster warrant-based searches and to raise skepticism if a warrant could have been obtained but was not.
- 232. See generally Illinois v. Gates, 462 U.S. 213, 241 (1983) (emphasizing "the value of corroboration"); United States v. Harris, 403 U.S. 573, 587-88 (1971) (same). On the value of multiple witnesses, see Cramer v. United States, 325 U.S. 1, 24 (1945), which describes a "two-witness requirement" as "a venerable safeguard against false testimony"; and Minzner, supra note 41, at 938, which argues that "[t]o the extent that officers work in pairs, [falsehoods] can only be concealed by a conspiracy between partners." On the value of video footage, see, for example,

problematic maintain a record of all officers who have a history of credibility issues and require some form of notification whenever a flagged officer is involved in a given search or seizure.²³³

Of course, courts could require other accountability mechanisms. The fundamental point, however, is that in at least some cases — when testilying is an issue — *some* such safeguard should be necessary. For while testilying may be a predictable outgrowth of officers' potential biases and lack of accountability, it is still deeply corrosive to the Fourth Amendment. Courts tasked with enforcing the amendment thus have a duty to look out for signs that a given officer or group of officers suffers from such credibility deficits — particularly in the large urban police departments where testilying has most frequently been identified. ²³⁴ And unless alternative accountability mechanisms are put in place, courts confronting such problems should make clear that they will ratchet down or abandon any presumptions of credibility that might otherwise apply.

C. Informants

The final two categories of claim proponents, confidential informants and anonymous witnesses, share a characteristic that frustrates efforts to hold them accountable: their identities are concealed from the people trying to assess their credibility. For confidential informants, that concealment is only partial. Lawenforcement officers know who they are, but the judicial actors who have to assess their claims do not.

At best, this group's baseline risk of bias will be comparable to law-enforcement officers. Indeed, confidential informants will sometimes *be* undercover police officers. More frequently, though, confidential informants will be people "in the underworld or . . . on its periphery." This very fact raises some question about their credibility, given the commonly held view that people engaged

Minzner, supra note 41, at 938; and Slobogin, supra note 221, at 1051-52. But cf. Woodrow Hartzog, Body Cameras and the Path to Redeem Privacy Law, 96 N.C. L. REV. 1257 (2018).

^{233.} See David N. Dorfman, *Proving the Lie: Litigating Police Credibility*, 26 AM. J. CRIM. L. 455, 496-97 (1999); cf. Crespo, supra note 32, at 2090 (discussing court-generated *Brady* databases).

^{234.} See Goldstein, supra note 222; Corina Knoll, Ben Poston & Maya Lau, A Deputy's Misdeeds Kept Secret, L.A. Times, Aug. 12, 2018, at 1; Mark O'Keefe, "Culture of Lying" Hurts Credibility Police Everywhere; People Less Willing to Believe the Cops, Times-Picayune, May 14, 2000, at A1.

^{235.} See Richard C. Donnelly, *Judicial Control of Informants, Spies, Stool Pigeons, and Agent Provocateurs*, 60 YALE L.J. 1091, 1119-21 (1951) (distinguishing undercover officers from typical informants with respect to "minimum standards of character, intelligence and trustworthiness," and incentives to be truthful).

^{236.} LAFAVE, supra note 217.

in criminal activity are more likely to be untruthful.²³⁷ In most cases, the informant's bias will be even more pronounced, however, as the typical informant cooperates with law enforcement in exchange for a tangible benefit. Sometimes that benefit is money,²³⁸ but usually it is lenient treatment with respect to the informant's own criminal behavior.²³⁹ The informant thus frequently has a strong motive to fabricate or embellish evidence: "a pound of another's flesh will spare [his] own."²⁴⁰

This high risk of bias notwithstanding, informants are less accountable for their potential falsehoods than any other claim proponent encountered thus far. For, unlike police officers, informants are never exposed to questioning under oath, which would strip them of their quasianonymity. And while informants are subject to the same false-reporting statutes applicable to civilians, law-enforcement actors are far less likely to prosecute informants under those statutes. ²⁴¹

Given this low-credibility baseline, multiple scholars and jurists have proposed barring confidential informants altogether, except perhaps in exceptional circumstances.²⁴² But such a position comes with substantial costs. Some types

- 237. See Harris, 403 U.S. at 600 (1971) (Harlan, J., dissenting); On Lee v. United States, 343 U.S. 747, 756 (1952); Donnelly, *supra* note 235, at 1092-1093; LaFave, *supra* note 208, at 1194; Moylan, *supra* note 37, at 769; Rich, *supra* note 99, at 908-09 (noting general skepticism of informants' character); *cf.* FED. R. EVID. 609 (permitting the "attacking [of] a witness's character for truthfulness by evidence of a criminal conviction").
- 238. See Rich, supra note 99, at 907-09.
- **239.** See James Q. Wilson, The Investigators 65 (1978) (describing leniency as "the major motive... of an informant").
- **240.** Eugene Cerruti, *The Demise of the* Aguilar-Spinelli *Rule: A Case of Faulty Reception*, 61 DENV. L.J. 431, 435; *cf.* Jones v. United States, 266 F.2d 924, 928 (D.C. Cir. 1959), *vacated*, 362 U.S. 257 (1960) ("[It is] *expected* that the informer will . . . reach for shadowy leads, or even seek to incriminate the innocent." (emphasis added)).
- 241. In part this reluctance is subliminal, as law-enforcement actors are predisposed to believe that their informants are telling the truth. See Mary Nicol Bowman, Full Disclosure: Cognitive Science, Informants, and Search Warrant Scrutiny, 47 AKRON L. REV. 431, 460 (2014); Robert P. Mosteller, The Special Threat of Informants to the Innocent Who Are Not Innocents: Producing "First Drafts," Recording Incentives, and Taking a Fresh Look at the Evidence, 6 OHIO ST. J. CRIM. L. 519, 552 (2009). Those biases are exacerbated by law-enforcement actors' "inherent conflict of interest" in this domain. See Clifford S. Zimmerman, Toward a New Vision of Informants: A History of Abuses and Suggestions for Reform, 22 HASTINGS CONST. L.Q. 81, 146 (1994). The very secrecy surrounding informants, moreover, means that law-enforcement actors "are not constrained" to be more diligent in monitoring informants' veracity. Id.
- 242. See Adams v. Williams, 407 U.S. 143, 152-53 (1972) (Brennan, J., dissenting) (quoting 436 F.2d 30, 38-39 (Friendly, J., dissenting)); United States v. Harris, 403 U.S. 573, 599-600 (1971) (Harlan, J., dissenting); Draper v. United States, 358 U.S. 307, 323-24 (1959) (Douglas, J.,

of crime – most notably, organized crime and vice crime – are exceedingly difficult to prosecute without help from sources on the inside.²⁴³ Those sources, moreover, will not come forward if they perceive a risk that their identities might be revealed.²⁴⁴ Guarding against this risk, prosecutors will often dismiss a case rather than reveal a confidential source's identity if a court presses them to do so.²⁴⁵ "[T]he real choice," in other words, "is not between unnamed informants and named ones, but between unnamed informants and none at all."²⁴⁶ Unless a court is willing to interpret the Fourth Amendment to render certain crimes de facto unenforceable, an outright ban on confidential informants will thus likely be a bridge too far – as it has been for the Supreme Court.²⁴⁷

To say that confidential sources should sometimes be permitted, however, is not to discount the need for safeguards that would make such sources as reliable as they can be. And courts are in a position to insist that such safeguards be implemented by refusing to treat confidential informants as sufficiently reliable in their absence. The most obvious mechanism for promoting greater informant reliability would be to insist on administrative systems within police departments that train informants' handlers and track informants' records of success, with an eye toward reporting such information to courts. Scholars of policing have long advocated reforms along these lines, ²⁴⁸ and some states have imposed such requirements by statute. ²⁴⁹ Judges could spur similar reforms by treating such safeguards as a prerequisite to finding an informant reliable enough to support a challenged search or seizure. ²⁵⁰

dissenting); see also Slobogin, supra note 21, at 17 n.50 (urging in camera disclosure alternative).

- **243.** See Donnelly, supra note 235, at 1093; Stuntz, supra note 207, at 939-40.
- 244. See Roviaro v. United States, 353 U.S. 53, 66-67 (1957) (Clark, J., dissenting) ("Once an informant is known the drug traffickers are quick to retaliate. Dead men tell no tales."); see also McCray v. Illinois, 386 U.S. 300, 303 n.4 (1967).
- 245. See, e.g., Roviaro, 353 U.S. at 66-67 (Clark, J., dissenting).
- **246**. Stuntz, *supra* note 207, at 939.
- 247. See McCray, 386 U.S. at 312 ("[A] rule virtually prohibiting the use of informers would 'severely hamper the Government' in enforcement of the narcotics laws." (quoting Lewis v. United States, 385 U.S. 2016, 210 (1966))).
- **248.** See Moylan, supra note 37, at 760; Zimmerman, supra note 241, at 141-42. But see Goldberg, supra note 53, at 813-14 (suggesting that police officers' intuitions might be more accurate than past statistical evidence of an informant's track record).
- 249. See, e.g., Conn. Gen. Stat. Ann. § 54-41c (West 2019); IOWA CODE Ann. § 813 (West 2019).
- 250. See Carl McGowan, Rule-Making and the Police, 70 MICH. L. REV. 659, 690 (1972) ("The judges might say in effect to the police: If you can satisfy us that you are doing everything you can to reduce the incidence of violations . . . we will no longer need to seek deterrence through the indirect sanction of exclusion. This would be a sensible approach, since direct discipline

The Supreme Court has never held such an approach to be strictly necessary. ²⁵¹ But it has repeatedly emphasized the importance of an informant's track record when assessing his reliability, sometimes going so far as to stress that the informant at issue had "always" provided reliable information in the past. ²⁵² Given that many law-enforcement agencies already employ systems to monitor their informants' effectiveness, the arguments for incorporating such information into the probable-cause inquiry itself seems facially strong—and could have salutary systemic effects given the inherent credibility problems this class of claim proponents presents. ²⁵³

D. Anonyms

Anonymous witnesses anchor the rightmost pole of probable cause's second axis, where the credibility baseline reaches its nadir. Unlike confidential informants, these claim proponents are completely anonymous: not even the police know who they are. As a result, it is impossible to hold them accountable for any false statements they might make. Indeed, "eliminating accountability... is ordinarily the very purpose of anonymity," to the point that one might fairly question the motives and thus the biases of these witnesses.²⁵⁴ But the problems surrounding anonymous informants run even deeper. For not only is it impossible

imposed by the police internally is far more likely to deter than remote exclusions of evidence in criminal trials."). For examples of law-enforcement agencies that already employ administrative measures along these lines at the state level, see James R. Farris, The Confidential Informant: Management and Control, in Critical Issues in Criminal Investigation 35-39 (1984). For a description at the federal level, see Zimmerman, *supra* note 241, at 133-34.

- 251. See United States v. Harris, 403 U.S. 573, 575-76 (1971).
- 252. E.g., Draper v. United States, 358 U.S. 307, 309 (1959); Husty v. United States, 282 U.S. 694, 700 (1931); see United States v. Ross, 456 U.S. 798, 800 (1982); Arkansas v. Sanders, 442 U.S. 753, 761 (1979); McCray v. Illinois, 386 U.S. 300, 303-04 (1967). One might worry that "if the informant's first tip cannot be used (because he has no track record), he may never get a track record for use in subsequent cases." Stuntz, supra note 207, at 939 n.152; see also Alschuler, supra note 1, at 237-38; cf. Florida v. Harris, 568 U.S. 237, 245 (2013) (questioning how a court could assess the reliability of a rookie drug-detecting dog under a test requiring evidence of successful past performance). But as noted infra note 256, the informant's tip can always be investigated without conducting a search or seizure and if confirmed can establish an initial track record.
- 253. Police departments have employed such systems for decades. *See* WILSON, *supra* note 239, at 74-75 (discussing the FBI); Melvin Gutterman, 58 J. CRIM. L. CRIMINOLOGY & POLICE SCI. 32, 33 (1967) (describing the Chicago Police Department). *See generally* Andrew Guthrie Ferguson, The Rise of Big Data Policing (2018) (discussing the rise of internal monitoring programs).
- 254. Navarette v. California, 572 U.S. 393, 405-06 (2014) (Scalia, J., dissenting) (quoting McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 385 (1995) (Scalia, J., dissenting)). To be sure, some

to confirm an anonymous witness's veracity, it is also often difficult to confirm her very existence, a fact police officers sometimes exploit to invent anonymous sources in an effort to cover up illegal searches and seizures.²⁵⁵

Given these serious concerns, multiple prominent scholars support an outright ban on anonymous claim proponents.²⁵⁶ In a similar vein, the Supreme Court has noted that at least "[s]ome [anonymous] tips, completely lacking in indicia of reliability, would either warrant no police response or require further investigation before a forcible stop of a suspect would be authorized."²⁵⁷ But the Court has rejected a general rule "that leaves virtually no place" in the probable-cause analysis for anonymous informants, as it views some such tips as simply too valuable to surrender.²⁵⁸

The Court's approach ultimately rests on an underlying judgment about the proper balance between liberty and security in society—the central question animating probable cause's third axis.²⁵⁹ But even if one concludes that there are some cases in which anonymous tips should be permitted, courts can and should

anonymous witnesses may simply be trying to aid law enforcement without entangling themselves in a subsequent prosecution. But the essential point remains: a claim proponent who "is truly anonymous . . . can lie with impunity." Florida. v. J.L., 529 U.S. 266, 275 (2000) (Kennedy, J., concurring); see also Illinois v. Gates, 462 U.S. 213, 237-38 (1983) (describing the credibility of anonymous sources as "unknown, and unknowable").

- 255. See Yale Kamisar, Gates, "Probable Cause," "Good Faith," and Beyond, 69 IOWA L. REV. 551, 577 (1984) (describing a study in which multiple judges "expressed fears" that informants in warrant applications they reviewed were "'manufactured' by the police" (quoting R. Van Duizend et al., The Search Warrant Process: Preconceptions, Perceptions, and Practices (Nat'l Ctr. for State Courts, draft report, 1983) (on file with University of Iowa and University of Michigan law libraries))); see also Adams v. Williams, 407 U.S. 143, 152-53 (1972) (Brennan, J., dissenting) (worrying that information attributed to a purported informant could "readily have been manufactured by the officer after the event" (quoting Williams v. Adams, 436 F.2d 30, 38-39 (1970) (Friendly, J., dissenting))); cf. Florida v. J.L., 529 U.S. at 275 (Kennedy, J., concurring) (discussing the risk of fabrication with anonymous informants). For examples of such fabrication, see Commonwealth v. Ramirez, 617 N.E.2d 983, 984-86 (Mass. 1993) (Boston Police Department); Ralph S. Spritzer, Electronic Surveillance by Leave of the Magistrate: The Case in Opposition, 118 U. Pa. L. REV. 169, 192-93 (1969) (FBI).
- 256. See, e.g., Kamisar, supra note 255, at 575-76; LaFave, supra note 92, at 78; LaFave, supra note 208, at 1192-94. These scholars would of course still permit law-enforcement officers to investigate anonymous tips through tactics short of stops, frisks, searches, or arrests. Cf. Steven Duke, Making Leon Worse, 95 YALE L.J. 1405, 1418 (1986) ("An alternative to all modes of search is more police work: more interviewing of witnesses, more surveillance, . . . more of whatever police do, other than searching, to solve or create cases.").
- 257. Adams v. Williams, 407 U.S. 143, 147 (1972).
- **258.** Illinois v. Gates, 462 U.S. 213, 237-38 (1983) ("[S]uch tips... frequently contribute to the solution of otherwise 'perfect crimes.'").
- 259. See infra Part III.

ensure that such claims are as reliable as they can be. Toward that end, two potential doctrinal mechanisms are worth considering. First, courts can insist that, when a search or seizure is predicated entirely on an anonymous tip, the tip be recorded in a fashion that confirms the tipster's existence and thus guards against officer fabrication. Second, courts can limit the role of anonymous tips in the analysis, permitting them to add one additional tile to an already suspicious mosaic but not to bear an evidentiary claim's entire inculpatory weight.

Notably, these two partial safeguards sit comfortably (if implicitly) within the Supreme Court's existing precedents, as becomes apparent if one compares two of its main Fourth Amendment opinions concerning anonymous witnesses. In the first, *Florida v. J.L.*, the Court rejected a stop and frisk predicated on an anonymous tip that "a young black male standing at a particular bus stop and wearing a plaid shirt was carrying a gun." Notably, the Court made a point of observing that there was "no audio recording of the tip" that could confirm the tipster's existence. Let Just as importantly, when the officers arrived at the scene, all they saw was that there "really was a young black male wearing a plaid shirt at the bus stop," which of course was hardly suspicious in its own right. An unrecorded tip, in other words, was the sole inculpatory tile in the mosaic—and that was not enough.

^{260.} Ideally, such a recording mechanism would also convey to any actual anonymous sources that their reports may not be *fully* anonymous. *See* Florida v. J.L., 529 U.S. 266, 275 (2000) (Kennedy, J., concurring) ("[A] tip might be anonymous in some sense yet have certain other features [that bolster its reliability]." (describing recorded calls to the police as a prime example)).

^{261.} Id. at 268 (majority opinion).

²⁶². *Id*.

²⁶³. *Id*. at 271.

^{264.} Florida v. J.L. is all but irreconcilable with an earlier case, Alabama v. White, 496 U.S. 325 (1990), in which officers reportedly received an anonymous call predicting that a woman carrying cocaine would soon leave a specific apartment in a brown car with a broken taillight and would drive to a nearby motel. Id. at 327. Nothing in the record indicated that the tip was recorded. Cf. id. at 333 (Stevens, J., dissenting). And as the dissenting Justices observed, the independent facts observed by the officers, while in some sense "confirming" the tip, were ultimately indistinguishable from the conduct of an innocent commuter. See id. Florida v. J.L. expressly labels White a "borderline" case and adopts reasoning that directly contradicts White's core logic, essentially limiting White to its facts. J.L., 529 U.S. at 271. Compare White, 496 U.S. at 331-32 ("[If an anonymous] informant is shown to be right about some things, he is probably right about . . . the claim that the object of the tip is engaged in criminal activity." (citing Illinois v. Gates, 462 U.S. 213, 244 (1983))), with J.L., 529 U.S. at 271 ("Knowledge about a person's future movements indicates some familiarity with that person's affairs, but . . . does not necessarily imply that the informant knows . . . whether that person is carrying hidden contraband.").

By contrast, in the second case, *Illinois v. Gates*, the Court upheld a search premised on an anonymous letter that claimed a husband and wife were hiding "over \$100,000 worth of drugs in their basement." Unlike in *J.L.*, the actual letter here was entered into the record, thus confirming the tipster's existence. More importantly, the letter was far from the only inculpatory tile implicating the couple in drug trafficking. On the contrary, the police observed the husband take a one-way flight to a locale "well-known as a source of narcotics" and then almost immediately drive at least twenty-two hours nonstop back to Chicago—in a car with false license plates. ²⁶⁷ "Even standing alone," the Court held, that "independent investigation . . . suggested that the [couple was] involved in drug trafficking." A recorded tip, in other words, was just one additional tile in an already suspicious mosaic—and that *was* enough.

In contrast to these two precedents, there is the Court's recent five-four decision in *Navarette v. California*.²⁶⁹ At first blush, this opinion seems to reject at least part of the reasoning in *Gates* and *J.L.* The *Navarette* Court upheld a traffic stop premised on a 911 call in which the caller claimed that a truck with a specified license plate had run her off the road. The call *was* recorded—a fact upon which the majority heavily relied in upholding the caller's reliability.²⁷⁰ But still, to Justice Scalia and his dissenting colleagues, *Navarette* represented a significant "departure" from the separate "requirement that anonymous tips must be corroborated" by independent inculpatory information.²⁷¹

Taken at face value, *Navarette* is indeed hard to reconcile with *Gates* and *J.L.* on this score.²⁷² There is, however, an alternative reading of *Navarette* that is considerably easier to square with those cases' limitations on anonymous tips. In fact, Chief Justice Roberts, who provided the essential fifth vote in *Navarette*,

^{265. 462} U.S. at 225.

^{266.} See People v. Gates, 403 N.E.2d 77, 82 (Ill. App. Ct. 1980).

^{267.} See Gates, 462 U.S. at 226.

^{268.} *Gates*, 462 U.S. at 243; *see* Kamisar, *supra* note 255, at 567 (describing *Gates* as a case in which independent "police corroboration constitute[d]... the 'dominant element' of probable cause"). *But cf. Gates*, 462 U.S. at 291 (Stevens, J., dissenting) (noting a potential mischaracterization of the record with respect to the majority's account of what that independent investigation actually revealed).

^{269. 572} U.S. 393 (2014).

^{270.} See id. at 400-01 (describing the recording as an important "indicator of veracity"). Notably, the tipster may not have been anonymous at all. See id. at 396 n.1.

^{271.} *Id.* at 405 (Scalia, J., dissenting); *see id.* at 411 ("[T]he pesky little detail left out of the Court's reasonable-suspicion equation is that, for the five minutes that the truck was being followed [by the police its] driving was irreproachable.").

^{272.} See id. at 405 (describing Navarette as rejecting "our prior cases").

offered that alternative reading five years prior, in a dissent from a denial of certiorari in a case with facts identical to *Navarette*'s. In that separate opinion, the Chief Justice characterized *Navarette*'s eventual holding not as a departure from the "general rule" that anonymous tips should be independently corroborated, but rather as a narrow exception to that rule in the unique context of traffic stops aimed at combating drunk driving. ²⁷³ In the Chief Justice's view, such cases are categorically distinguishable for at least two reasons: the intrusion associated with a mere traffic stop is brief and limited, ²⁷⁴ and the underlying crime (drunk driving) presents a "unique" public-health crisis, each instance of which entails "imminence of . . . danger . . . [that] exceeds that at issue in other types of cases." ²⁷⁵ Weighing these two special considerations, Chief Justice Roberts argued that the Fourth Amendment ought not require "independent corroboration" of an anonymous tip "in the special context of anonymous tips reporting drunk driving," even as he accepted that such tips "might be constitutionally problematic in other . . . circumstances." ²⁷⁶

This reasoning should by now stand out as a fairly straightforward manifestation of probable cause pluralism: anonymous tips, the Chief Justice says, are constitutionally sufficient in some "types of cases" but "constitutionally problematic" in others. Importantly, however, Chief Justice Roberts's pluralism does not engage probable cause's second analytical axis. He is not disputing that anonymous tipsters—including those reporting alleged instances of drunk driving—have inherently low credibility baselines. Nor is he embracing any alternative doctrinal frameworks that might rehabilitate or mitigate those low baselines. Rather, he is making a separate argument that the threshold of certainty should be lower for this particular class of cases, given his assessment of the competing state and private interests at stake. He solves the problem, in other words, by leveraging probable cause's third and final axis—to which we now turn.

III. AXIS THREE: DETERMINING CERTAINTY THRESHOLDS

Our discussion until now has focused on probable cause's analytic methodology, assessing how one ought to *measure* the strength of the government's claim that a search or seizure was constitutional. Probable cause's third axis, by

^{273.} Virginia v. Harris, 558 U.S. 978, 980 (2009) (Roberts, C.J., joined (interestingly) by Scalia, J., dissenting).

^{274.} See *id.* at 981 (describing traffic stops as "less invasive" than other searches or seizures); see also United States v. Brignoni-Ponce, 422 U.S. 873, 880 (1975) ("Because of the limited nature of the intrusion, stops of this sort may be justified on facts that do not amount to the probable cause required for arrest.").

^{275.} Harris, 558 U.S. at 980 (Roberts, C.J., dissenting).

^{276.} Id. at 979-80.

contrast, turns to what it *means* to say that the challenged conduct passes constitutional muster—that it is supported by "probable cause." Combined with the two preceding axes, this axis thus finally permits an answer to the ultimate question: when is an evidentiary claim, supported by a given claim proponent, strong enough to sustain a challenged search or seizure? Understood as such, the key issue for the Axis Three inquiry is picking the applicable standard of proof—in a manner that is sufficiently sensitive to the competing interests at stake while also doctrinally administrable over a large number of cases.

This is no easy task. After all, the standard of proof can correspond to any degree of certainty between two poles, one representing absolute certainty that the target is guilty and the other representing absolute certainty that she is innocent.²⁷⁷ And the decision of where to set it is highly consequential, as it allocates the risk of a *wrong* decision between the parties and thus inevitably balances their competing interests.²⁷⁸ In the Fourth Amendment context, this competition pits the state's interest in maintaining public order, safety, and security against the individual's interest in her liberty, privacy, autonomy, dignity, reputation, and personal safety. A neutral standard of proof (whether framed in words like "preponderance of the evidence" or captured mathematically as more than fifty percent)²⁷⁹ treats those interests as roughly coequal, whereas a higher standard puts a thumb on the scale in favor of individuals targeted for search or seizure and a lower one tips it toward the government.

On this understanding, to say that a search or seizure is "supported by probable cause" is simply to say that, given the inherently uncertain nature of the underlying evidence, the benefits of conducting the search or seizure outweigh the harms. ²⁸⁰ But if that is what probable cause means, it is hard to imagine that it ought to mean the same thing *in every case*. After all, sometimes the state's interests will be particularly compelling or its intrusion into individual liberty will be slight, while in other cases the state's interest may be weak or its intrusion

^{277.} See United States v. Lopez, 328 F. Supp. 1077, 1094 (E.D.N.Y. 1971) (Weinstein, J.) (describing probable cause as "a continuum of probability" that "begins with no evidence" and "extends to almost certainty"); Louis Kaplow, *Burden of Proof*, 121 YALE L.J. 738, 743-44 (2012) (describing the poles of the standard-of-proof spectrum as "o% and 100%" confidence).

^{278.} See McCauliff, supra note 13, at 1319; Taslitz, supra note 9, at 854-55; see also Kaplow, supra note 277, at 771.

^{279.} Debates over whether to quantify probable cause (of which there are many) are largely proxy battles over the probabilistic method: the standard must inevitably be quantified in a probabilistic inquiry whereas quantification is (at best) only symbolically useful in a qualitative inquiry. Cf. supra note 131.

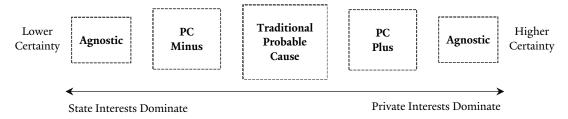
^{280.} *Cf.* Lerner, *supra* note 3, at 1020 (borrowing from Learned Hand to define probable cause as "P x V > C, where P is the probability of a successful search, V is the social benefit . . . and C is the social cost").

severe. The balance of interests can and will vary, and thus so too should the standard of proof.²⁸¹

The real conceptual challenge at this point is thus not to defend pluralism but to render it administrable. For once administrability becomes a concern, the otherwise first-best normative approach (balancing the many competing interests against each other in each case) seems untenable: the informational and cognitive costs are just too high for courts to perform such a balancing in every case, especially given the raw number of law-enforcement-civilian interactions at issue.²⁸² A "tuning knob" approach, in other words, will not work.²⁸³ A menu of preset stations, however, might do the trick. Consider the following possibility:

FIGURE 3.

AXIS THREE: CERTAINTY THRESHOLDS, ORGANIZED BY JUSTIFICATION



The basic idea here is that the spectrum of potential standards of proof can be usefully divided into five discrete thresholds—one at the neutral center, two

- 281. Multiple scholars accordingly endorse a variable probable-cause standard. See Alschuler, supra note 1, at 245-56; Amar, supra note 2, at 801-02; Grano, supra note 133, at 503-05; LaFave, supra note 92, at 54; William J. Stuntz, O.J. Simpson, Bill Clinton, and the Transsubstantive Fourth Amendment, 114 HARV. L. REV. 842 (2001); see also Brinegar v. United States, 338 U.S. 160, 183 (1949) (Jackson, J., dissenting); cf. Kaplow, supra note 277, at 784-85 ("[T]he optimal evidence threshold could be associated with any ex post probability whatsoever. . . . [W]e should . . . be troubled by the notion that it may make sense, even as an approximation, to employ a single threshold . . . in a wide range of contexts in which the consequences vary dramatically.").
- **282.** See Kaplow, *supra* note 277, at 747 ("The calculus for determining the optimal evidence threshold is, on reflection, conceptually straightforward As a practical matter, however, the factors are many, their magnitudes undoubtedly vary greatly across contexts, and ascertaining the pertinent quantities is likely to be difficult.").
- 283. See Paul Ohm, Probably Probable Cause: The Diminishing Importance of Justification Standards, 94 MINN. L. REV. 1514, 1522 (2010) (arguing that "privacy-by-tuning-knob just does not work"); see also Amsterdam, supra note 1, at 415 (describing an infinitely "graduated fourth amendment" as "splendid in its flexibility, awful in its unintelligibility, unadministrability, unenforcibility and general ooziness").

at each of the far poles where state or private interests completely dominate, and two at intermediate points between the center and each pole. This approach inevitably lumps together some cases that might not be perfectly alike, and thus sacrifices some conceptual precision. But it reaps a sizable reward: instead of fiddling with an infinitely variable tuning knob in every case, the decision-maker need only pick among one of the five stations—which, according to some psychologists, is about all we can realistically expect from judges in the first place. ²⁸⁴ Moreover, to aid in that selection, the third axis uses a preponderance-of-the-evidence standard as its default—an anchor that serves as the presumptive standard of proof absent some compelling reason to adjust upward or downward.

The remainder of this Part defends this basic setup. It advances the argument that probable cause's presumptive standard of proof ought to be a preponderance of the evidence, and it defends the corollary proposition that adjustments to that standard are warranted in certain circumstances. Throughout the discussion, examples from the Court's Fourth Amendment jurisprudence are offered as evidence that the Court's thinking already runs along these lines. It is important to note, however, that this descriptive claim is very much a reinterpretation of the Court's precedents, which on their face expressly espouse the unitarian view that probable cause is "[a] single, familiar standard" that performs the "requisite 'balancing'" of state and private interests in every case to which it applies. That unitarian assumption unravels, however, once one recognizes two inconvenient truths. The Supreme Court has persistently refused to define what its supposedly "single, familiar standard" of probable cause actually *is*. ²⁸⁶ And it has expressly adopted at least one other standard of proof for assessing searches and seizures — namely, reasonable suspicion. ²⁸⁷

The misleading idea that probable cause is a single unitary standard persists largely because courts and commentators frequently get lost in a misconceived dichotomy between the Fourth Amendment's two clauses: the warrant clause, which is taken to call for a single and fixed probable-cause requirement, and the reasonableness clause, which is taken to permit an interest-balancing approach

^{284.} See Kevin M. Clermont, *Procedure's Magic Number Three: Psychological Bases for Standards of Decision*, 72 CORNELL L. REV. 1115, 1134-50 (1987) (noting cognitive limitations that impede humans from conceptualizing probability beyond "seven categories" or thresholds); cf. Dunaway v. New York, 442 U.S. 200, 219-20 (1979) (White, J., concurring) ("[I]f courts and law enforcement officials are to have workable rules, . . . [interest] balancing must in large part be done on a categorical basis.").

^{285.} *Dunaway*, 442 U.S. at 213-14; *see also* Lerner, *supra* note 3, at 954 (noting that "probable cause is widely viewed in the legal community as a fixed standard").

^{286.} See infra Section III.A.

^{287.} See infra Section III.B.

that yields occasional exceptions to that probable-cause requirement. ²⁸⁸ Opponents disagree over which clause ought to predominate. But properly understood, their debate largely boils down to semantics. Interest balancing (that is to say, "reasonableness") is an inherent component of probable cause's third analytical axis—the defining feature of its standard of proof. Indeed, without interest balancing, the very idea of "probable cause" would be unintelligible. ²⁸⁹ But the idea that such interest balancing (and thus probable cause's standard of proof) ought to respond to a given case's actual interests is simply probable cause pluralism by another name. ²⁹⁰

The conceptual framework offered here thus treats the Fourth Amendment's two clauses as integrated complements: a search or seizure is "reasonable" if it is supported by probable cause. And a search or seizure is supported by probable cause if the government's evidentiary claim is strong enough and reliable enough to satisfy the governing standard of proof—which in turn corresponds ("reasonably") to the competing interests at hand.²⁹¹ Axis Three thus assimilates the pluralistic interest balancing that the Court embraces in its reasonableness precedents into the definition of probable cause itself.

- 288. See Bacigal, supra note 9, at 763-64 (noting the "longstanding controversy over the relationship between the amendment's two conjunctive clauses"); Comment, Search and Seizure in the Supreme Court: Shadows on the Fourth Amendment, 28 U. CHI. L. REV. 664, 679 (1961) (describing Fourth Amendment jurisprudence "as a struggle" or "a search for a connective" between "the amendment's two clauses"). Supreme Court opinions routinely vacillate between treating the warrant clause or the reasonableness clause as the Fourth Amendment's touchstone. Compare, e.g., Dunaway, 442 U.S. at 213-14 (emphasizing the "narrow limitations" on "employing the balancing test" to deviate from "the principle that seizures are 'reasonable' only if supported by probable cause"), with New Jersey v. T.L.O., 469 U.S. 325, 337 (1985) ("[T]he underlying command of the Fourth Amendment is always that searches and seizures be reasonable [and] what is reasonable depends on the context within which a search takes place.").
- **289.** *See*, *e.g.*, Brinegar v. United States, 338 U.S. 160, 176 (1949) ("[P]robable cause is . . . the best compromise that has been found for accommodating [the] often opposing interests" of "enforcing the law in the community's protection" and protecting "citizens from rash and unreasonable interferences with privacy").
- 290. See Alschuler, supra note 1, at 252 ("Rather than speak of probable cause to believe, the court might speak of probable cause to do [which] would mean 'good reason,' no more and no less."); LaFave, supra note 92, at 56 n.86 ("[I]t would seem to make no difference in terms of outcome whether the balancing is done merely to determine what is reasonable or to determine what level of probable cause is required."); cf. Heien v. North Carolina, 135 S. Ct. 530, 537 (2014) (describing "reasonable cause" as "a synonym for 'probable cause'"); Gooding v. United States, 416 U.S. 430, 454-56 (1974); Stacey v. Emery, 97 U.S. 642, 646 (1878) ("If there was a probable cause of seizure, there was a reasonable cause. If there was a reasonable cause of seizure, there was a probable cause.").
- **291.** This formulation brackets the procedural question of when warrants ought to be required. *See supra* note 2.

The Supreme Court's opinion in *Camara v. Municipal Court*²⁹² directly supports this assimilation. And yet, *Camara* is often misread to be the very case that creates the rift between the amendment's two clauses.²⁹³ This reading fails to take *Camara* on its own terms, which make clear that *Camara* is a probable-cause case. Indeed, the Court expressly holds that "probable cause' is the standard by which a particular decision to search is tested," and then goes on to apply that standard to the facts at hand.²⁹⁴ The opinion's only real innovation is its (pluralist) holding that a *lower standard* of probable cause applies to a specific class of searches (namely, building-code inspections) given the unique state interests at stake and the less severe nature of the search.²⁹⁵

The conceptual framework offered here embraces precisely that same pluralist conception of the Fourth Amendment's standard of proof. And as the discussion to follow will show, all of the probable-cause and reasonableness precedents in *Camara*'s wake can similarly be integrated into this pluralist account—in a manner that renders that standard of proof both flexible and administrable. To see this point more fully, let us consider Axis Three's anchor, adjustments, and poles.

A. The Anchor

There are two primary benefits of anchoring the probable-cause analysis to a default standard of proof. First, an anchor offers administrability, as judges will know where to start and, in most cases, where to end the inquiry. This will spare them from starting every suppression ruling with liberty and security squaring off as first principles. Second, an anchor offers consistency, as courts otherwise

^{292. 387} U.S. 523 (1967).

^{293.} See Griffin v. Wisconsin, 483 U.S. 868, 877 n.4 (1987) (describing Camara as establishing a "requirement of reasonableness," rather than requiring "a quantum of evidence"); ALLEN ET AL., supra note 2, at 525-26 (treating Camara as the beginning of "an open-ended 'reasonableness' standard" that departs from "the more traditional warrant-and-probable-cause formula").

^{294. 387} U.S. at 534.

^{295.} See id. at 535, 538; The Supreme Court, 1966 Term — Highlights of the Term, 81 HARV. L. REV. 112, 123-24 (1967) (noting that Camara formulates "a substantially less rigorous standard of probable cause to govern the issuance of warrants for administrative searches to enforce health and safety codes"). For these so-called "administrative searches," an inspector need not have the traditional "probable cause to believe that a particular dwelling contains violations." Camara, 387 U.S. at 534 (emphasis added); see infra Section III.A (discussing traditional probable cause). Rather, her search "could be based on a relatively low statistical probability that the house was in violation." Slobogin, supra note 21, at 78; see supra note 81 and accompanying text (discussing the statistical epistemology of administrative searches).

left to define the applicable standard on their own can and will apply any conceivable standard on the spectrum – which roughly describes the current state of affairs when it comes to probable cause.

The Supreme Court does not categorically oppose the idea of a default standard. On the contrary, it frequently (if inconsistently) treats the "traditional standard of probable cause" as a presumptive threshold for assessing searches and seizures, which is functionally the same as making it the anchor of Axis Three's broader interest-balancing enterprise. But for over two hundred years, the Court has steadfastly refused to say what that "traditional standard" actually entails. As a result, lower-court judges vary dramatically in their conceptualization of probable cause, with some pegging it at ten-percent certainty, others at ninety percent, and others still at every threshold in between. Before the conceptualization of probable cause, with some pegging it at ten-percent certainty, others at ninety percent, and others still at every threshold in between.

Saving the Fourth Amendment from this instability requires that some actual default standard be defined. And while the choice of that standard is fraught as a matter of first principles, it is considerably less so if the goal is to provide the most administrable second-best account. For when it comes to practicality, the choice is clear: "traditional probable cause" ought to be defined as meaning "more likely than not," i.e., "a preponderance of the evidence" or "anything greater than fifty percent." As Louis Kaplow observes, "the strong attraction of the 50% requirement is substantially attributable to its being a powerful focal point," an intuitive standard that everyone can easily wrap their heads around. Pegging the standard at this threshold, after all, reduces the Axis One and Axis Two inquiries to simple binary questions, without imposing any additional burden of assigning degrees of belief. Do you think the target is implicated in the

^{296.} Arizona v. Hicks, 480 U.S. 321, 329 (1987); *see* Dunaway v. New York, 442 U.S. 200, 214 (1979) (emphasizing the "narrow limitations" on "employing the balancing test" to deviate from "the principle that seizures are 'reasonable' only if supported by probable cause"); Chambers v. Maroney, 399 U.S. 42, 51 (1970); *cf.* United States v. Place, 462 U.S. 696, 718-19 (1983) (Brennan, J., concurring) ("[B]alancing inquiries should not be conducted except in the most limited circumstances."); *id.* at 722 (Blackmun, J., concurring) ("[T]he Framers of the Amendment balanced the interests involved and decided that a seizure is reasonable only if supported by a judicial warrant based on probable cause." (citations omitted)).

^{297.} See, e.g., Alschuler, supra note 1, at 245; Bacigal, supra note 41, at 293; Goldberg, supra note 53, at 790; McCauliff, supra note 13, at 1306 ("[W]hether 'probable cause' should be defined as 'more probable than not' . . . [has] perplexed courts and commentators for decades.").

^{298.} See McCauliff, supra note 13, at 1327.

^{299.} See Kaplow, supra note 277, at 743-44 (observing that "there [are] no other focal points—besides 0% and 100%, neither of which has any appeal"); Taslitz, supra note 9, at 884-85 (describing the preponderance standard as capturing an intuitive and powerful metaphor of a tipping scale). But see infra note 301 (discussing Kaplow's criticisms of the preponderance standard).

alleged behavior? Do you believe the proponent? If yes, then no matter how strong or weak that belief may be, the search or seizure is constitutional. Otherwise, it is not.

The preponderance standard's intuitive appeal likely explains why most lower-court judges treat probable cause as meaning "more likely than not" when pressed to define it. 300 To be sure, as Louis Kaplow notes, it is not obvious as a matter of first principles that a preponderance standard perfectly captures the correct balance of interests in the mine-run of cases. 301 But the more important point when seeking a workable and concededly second-best conceptualization is that the preponderance standard is not obviously *incorrect*. On the contrary, Fourth Amendment scholars have long observed that the core competing values of liberty and security animating this body of law are not only in perpetual conflict, but are often evenly matched: the state's ability to enforce its arguably most important body of law (the penal code) is pitted against the right of the people to move freely about society and to be secure in their private spaces. 302 Figuring out *exactly* the right balance between these competing interests in the "typical" case raises challenging and perhaps interminable normative and empirical questions. Treating them as presumptively commensurate, however, is sensible enough.

As an added benefit, the preponderance standard also conforms most closely to the Supreme Court's existing jurisprudence. When applying the probable-cause standard to a set of facts, the Court repeatedly holds that "[a] police officer has probable cause . . . [if] 'the facts available to [him] would "warrant a [person] of reasonable caution *in the belief*" that contraband or evidence of a crime is present" or that the target has committed a crime. ³⁰³ This formulation aligns with the preponderance standard insofar as we generally hold a belief in something

^{300.} See McCauliff, supra note 13, at 1327 (showing that 50% was the modal threshold in a survey of 166 judges); cf. Rachlinski et al., supra note 7, at 86 (reporting a study where "judges who concluded that probable cause was present" after viewing a set fact pattern "estimated the likely success of the search as 65 percent, while [those] who concluded that probable cause was not present gave an average estimate of 46 percent").

^{301.} See Kaplow, supra note 277, at 784 ("[T]he preponderance rule does not serve as a proxy for identifying a welfare-maximizing evidence threshold, not even approximately so [I]t would be a pure coincidence if the evidence threshold for the preponderance rule was equal to or even close to the optimal level.").

^{302.} On the intractable standoff between these competing values, see Herbert L. Packer, The Limits of the Criminal Sanction 153 (1968).

^{303.} Florida v. Harris, 568 U.S. 237, 243 (2013) (emphasis added) (third and fourth alterations in original) (quoting Texas v. Brown, 460 U.S. 730, 742 (1983) (quoting Carroll v. United States, 267 U.S. 132, 162 (1925))); see also, e.g., New Jersey v. T.L.O., 469 U.S. 325, 340 (1985); Berger v. New York, 388 U.S. 41, 59 (1967); Carroll, 267 U.S. at 149; Stacey v. Emery, 97 U.S. 642, 645-46 (1878); Wheeler v. Nesbitt, 65 U.S. 544, 551-52 (1860).

only when we think it is *more likely* true than *not.*³⁰⁴ The Court, moreover, has referred to probable cause as calling for the decision maker "to conclude that [illegal items] *were probably present* in the [area to be searched]."³⁰⁵ Most concretely, in the few cases where the facts are in true equipoise—that is to say, right at fifty percent—the Court has held that there was *not enough* evidence to support a search or seizure, thus indicating that something more than a fifty-fifty chance is required.³⁰⁶

To be clear, the claim that the Court's precedents support equating probable cause with a preponderance standard is controversial: most Fourth Amendment scholars read the Court to have held that probable cause means something *less* than fifty percent, a view apparently shared by at least one member of the current Court.³⁰⁷ A careful reading of the Court's precedents, however, shows this dom-

- **304.** *See Believe*, MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/believe [https://perma.cc/X8TJ-CXT8] (defining "believe" as "to consider to be true or honest"); *cf.* Shapiro, *supra* note 26, at 144 (noting the "distinction between 'believe' and 'suspect'").
- 305. Jones v. United States, 362 U.S. 257, 271 (1960) (emphasis added); see also T.L.O., 469 U.S. at 366 n.7 (Brennan, J., dissenting) ("[P]robable cause is absent . . . [if] a person of reasonable caution would not think it likely that a violation existed or that evidence of that violation would be found"); Sibron v. New York, 392 U.S. 40, 72 (1968) (Harlan, J., concurring in result); Locke v. United States, 11 U.S. 339, 347 (1813) ("not improbable"); cf. Neil Ackerman, Considering the Two-Tier Model of the Fourth Amendment, 31 Am. U. L. Rev. 85, 107 (1981) ("The very words 'probable cause' in the Constitution seem to connote a requirement that the officer be in possession of evidence rendering it more probable than not that an invasion of privacy was warranted."); Bacigal, supra note 41, at 281 ("[I]f the weatherman says it's probably going to rain today, I assume he's talking about more than a 50% chance."). But cf. Stern, supra note 26, at 1441 (suggesting dictionary definitions of "probable" vary).
- 306. See Johnson v. United States, 333 U.S. 10, 12, 16 (1948) (holding that officers lacked probable cause to arrest a woman who answered the door to a hotel room emitting an "unmistakable" smell "of burning opium" because they lacked "the knowledge that she was alone in the room"); see also Kentucky v. King, 563 U.S. 452, 465-66 (2011) (considering a hypothetical in which "there [i]s a 50% chance that [a] fleeing suspect ha[s] entered the apartment on the left rather than the apartment on the right" and presuming that this fact alone would not authorize a warrantless entry of either apartment); Maryland v. Garrison, 480 U.S. 79, 88 n.13 (1987) (expressing skepticism that a search would be justified if "the police know there are two apartments on a certain floor of a building, and have probable cause to believe that drugs are being sold out of that floor, but do not know in which of the two apartments the illegal transactions are taking place"); cf. Henry v. United States, 361 U.S. 98, 101 (1959) (describing Johnson as "the high water" point for probable cause but reaffirming it and the principle that "even 'strong reason to suspect' [is] not adequate to support a warrant for arrest").
- 307. See, e.g., Sherry F. Colb, Probabilities in Probable Cause and Beyond: Statistical Versus Concrete Harms, 73 LAW & CONTEMP. PROBS., Summer 2010, at 69, 71 ("We do not know exactly what the phrase 'probable cause' means [but we do] know what it does not mean: 'probably.'"); Grano, supra note 133, at 477 n.71; Slobogin, supra note 21, at 39 ("[T]he case law suggests

inant view to rest on three underlying mistakes: First, it disregards the pronouncements and applicable holdings discussed in the preceding paragraph. Second, it infers that the Court specifically rejected the preponderance standard merely from the Court's general reluctance to settle on *any* particular standard of proof. Finally, it mistakes the Court's one and only express rejection of the preponderance standard in *Texas v. Brown* for a holding of the Court, even though *Brown* was merely a plurality opinion that no majority of the Court has ever embraced. In the court has ever embraced.

that if the concept were quantified it would not require a fifty-one percent or more-likely-than-not level of certainty but rather something somewhat lower."); *see also* Transcript of Oral Argument at 44, Kansas v. Glover, 139 S. Ct. 1445 (2019) (No. 18-556).

- 308. The most frequently overread passage is the Court's oft-repeated statement that "[f]inely tuned standards such as proof beyond a reasonable doubt or by a preponderance of the evidence . . . have no place in the [probable-cause] decision." Florida v. Harris, 568 U.S. 237, 243-44 (2013) (quoting Illinois v. Gates, 462 U.S. 213, 235 (1983)); see also Ornelas v. United States, 517 U.S. 690, 695-96 (1996) (quoting related language from Gates); cf. Jane Bambauer, Hassle, 113 MICH. L. REV. 461, 462 (2015) (reading this passage as rejecting the preponderance standard); Stephen E. Henderson, A Rose by Any Other Name: Regulating Law Enforcement Bulk Metadata Collection, 94 TEX. L. REV. SEE ALSO 28, 39 (2016) (same). But this passage can just as easily be read as a rejection of all "finely tuned standards" and thus as a prime example of the Court's widely criticized refusal to define probable cause at all, not a rejection of one standard in particular. In fact, the passage is often paired with a statement that probable cause requires a "belief that contraband or evidence of a crime is present," Harris, 568 U.S. at 243-44 (emphasis added) (internal quotation marks omitted), a formulation that supports the preponderance standard, as noted supra note 303. The passage's roots, moreover, trace back to an opinion that merely made the point that a probable-cause inquiry need not be accompanied by all the procedural trappings of a trial-a caution against excessive process, not against a given standard of proof. See Gerstein v. Pugh, 420 U.S. 103, 121 (1975). But see Bambauer, supra, at 468 n.27 (reading Gerstein to reject the preponderance standard). Finally, it bears noting that the Court has on occasion linked probable cause and the preponderance standard in a manner that suggests their equivalence, not their distinction. See United States v. Sokolow, 490 U.S. 1, 7 (1989) (treating both standards as contrasts to reasonable suspicion without clear distinction between the two).
- **309.** 460 U.S. 730 (1983); *see id.* at 742 (plurality opinion) ("[P]robable cause does not demand any showing that . . . a belief [in the target's wrongdoing] be correct or more likely true than false.").
- 310. See Bacigal, supra note 41, at 289 (noting that while "a four person plurality" rejected the preponderance standard in *Brown*, a "majority of the Court has never explicitly held" as much). But see, e.g., Colb, supra note 307, at 72 (citing Brown as if it were a majority holding); Henderson, supra note 308, at 39 (same). Beyond Brown, the closest the Court has come to pegging probable cause below a preponderance is its statement (initially in a footnote) that "probable cause requires only a probability or substantial chance of criminal activity." Illinois v. Gates, 462 U.S. 213, 243 n.13 (1983) (emphasis added); see also Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370-71 (2009) (quoting Gates, 462 U.S. at 238, 244). Of course, the operative word "substantial" in this passage is undefined and thus does not resolve the issue. It is notable, though, that the author of both the "substantial chance" footnote and the Brown

To be sure, none of these doctrinal arguments clearly settles the matter. That is precisely the problem: the Supreme Court has never told us what probable cause means. But to the extent that any standard of proof can be gleaned from its cases, the best candidate is the preponderance standard, which has the added benefit of being both normatively defensible and practically suited to the task at hand, particularly if it is a default that allows for adjustments in special cases.

B. The Adjustments

The notion that certain special types of searches or seizures should be assessed under an adjusted probable-cause standard should be obvious to anyone who has ever heard of a *Terry* stop. Such a stop, after all, is nothing more than a specific type of seizure that the Supreme Court has authorized the police to conduct on a lower standard of proof, because the intrusion is comparatively less severe. ³¹¹ Yet scholars often view *Terry v. Ohio* as one of the seminal cases establishing the reasonableness clause as an alternative to, rather than an application of, the probable-cause requirement. ³¹²

This is a strained and unwarranted reading. The early drafts of *Terry* were written to offer a straightforward probable-cause holding.³¹³ Even in its final form, the opinion frames its core holding in terms virtually identical to a traditional probable-cause analysis.³¹⁴ Indeed, the "reasonable suspicion" standard

plurality, Justice Rehnquist, consistently sought to loosen the Fourth Amendment's constraints. *Cf.* Brett M. Kavanaugh, From the Bench: The Constitutional Statesmanship of Chief Justice William Rehnquist, Address before the American Enterprise Institute 9-10 (Sept. 18, 2017) (describing Rehnquist as leading "the charge" to rewrite "Fourth Amendment law," including by making "the probable cause standard more flexible and commonsensical"). That Justice Rehnquist's campaign never went further than a plurality opinion that in turn has never since been cited by a majority is telling. *Cf. Harris*, 568 U.S. at 243 (citing *Brown* for the proposition that probable cause requires a "belief' that contraband or evidence of a crime is present" without quoting its antipreponderance language).

- 311. Terry v. Ohio, 392 U.S. 1, 22 (1968).
- 312. See Allen et al., supra note 2, at 530-31; see also Lerner, supra note 3, at 957, 999.
- 313. See John Q. Barrett, Deciding the Stop and Frisk Cases: A Look Inside the Supreme Court's Conference, 72 ST. JOHN'S L. REV. 749, 753-54 (1998).
- 314. Terry's core holding concerns the validity of the challenged frisk. Cf. 392 U.S. at 31 (Harlan, J., concurring). And on that score, its analysis is indistinguishable from a holding that Officer McFadden had probable cause to arrest Mr. Terry. The Court, after all, expressly holds that McFadden had "reason to believe that he [was] dealing with an armed and dangerous individual," which means he had reason to believe he was dealing with someone who was committing the crime of carrying a concealed weapon. Id. at 27 (majority opinion) (emphasis added); see id. at 22, 24, 28, 30 (using similar "reason to believe" language); id. at 4 n.1 (noting that possession of a concealed weapon was a crime under the relevant penal code at the time); cf.

adopted in *Terry* was itself once a synonym for probable cause.³¹⁵ And, to this day, *Terry* is the namesake of a doctrine that assesses searches and seizures in a manner that is methodologically identical to any other probable-cause analysis – save for its lower standard of proof.³¹⁶ Indeed, that lower standard is the doctrine's sole distinguishing feature: *Terry* stops are assessed by traditional probable cause's "junior partner, reasonable suspicion," which might as well be called "probable cause light."³¹⁷

In short, *Terry v. Ohio* is best read as a paradigm case in support of the argument that certain types of searches and seizures can, and should, be assessed under an adjustment to "the traditional probable cause requirement." Recognizing as much carries us a long way toward resolving the schism between the Fourth Amendment's reasonableness and probable-cause clauses. The more significant issue, however, is to figure out when we ought to make such adjustments. Resolving this question will always require some case-specific interest-balancing.

- Florida v. Harris, 568 U.S. 237, 243 (2013) ("[An] officer has *probable cause* [if] the facts available to him would warrant a person of reasonable caution *in the belief* that contraband or evidence of a crime is present." (emphasis added) (internal quotations and brackets omitted)).
- 315. See Lerner, supra note 3, at 998 ("[A]t common law and for much of American history, the two phrases would likely have had, even to the discerning legal ear, roughly the same connotations."); cf. The Thompson, 70 U.S. (3 Wall.) 155, 162-63 (1865) (noting that as early as 1815, Justice Story defined "the terms 'probable cause'" as describing "circumstances [that] would warrant a reasonable ground of suspicion") (citing The George, 10 F. Cas. 201, 202 (Story, Circuit Justice, C.C.D. Mass. 1815)). This early interchangeability between the two standards may explain why, the same day Terry was decided, the Court decided two other stop-and-frisk cases without relying on its newly minted Terry opinion as a distinct doctrine or basis for decision an approach that led one Justice to wonder why the Court went to the trouble of departing from the more traditional probable cause standard in Terry in the first place. See Sibron v. New York, 392 U.S. 40, 70-74 (1968) (Harlan, J., concurring in the result). Indeed, it took nearly a decade for reasonable suspicion to emerge as a fully distinct standard in the Court's opinions. See United States v. Brignoni-Ponce, 422 U.S. 873, 880-82 (1975) (clarifying the Terry standard and coining the term "reasonable suspicion"); see also United States v. Cortez, 449 U.S. 411, 417-18 (1981); Ybarra v. Illinois, 444 U.S. 85, 93 (1979).
- **316.** See Safford Unified School Dist. No. 1 v. Redding, 557 U.S. 364, 370-71 (2009); Ornelas v. United States, 517 U.S. 690, 696 (1996).
- 317. Andrew E. Taslitz, What Is Probable Cause, and Why Should We Care?: The Costs, Benefits, and Meaning of Individualized Suspicion, 73 LAW & CONTEMP. PROBS., Summer 2010, at 145, 146. Many prominent scholars would have preferred Terry to have expressly acknowledged that it was simply embracing a variable probable-cause standard. See, e.g., Alschuler, supra note 1, at 249-50; LaFave, supra note 92, at 56.
- **318.** United States v. Place, 462 U.S. 696, 713 (1983) (describing *Terry* and its progeny as establishing a "relaxation of the traditional probable-cause requirement" when the "governmental interest" at hand is uniquely strong and where there is a "minimal intrusion" on individual liberty).

But we can nonetheless tease three guiding principles from our pluralistic framework and situate them within the Court's existing canon.

First, any adjustment away from the default of traditional probable cause requires some affirmative justification. Indeed, if that anchor is to maintain its heft and utility, any such justification should be both substantial and unique. An adjustment to the traditional standard of proof should thus be supported—as existing doctrine holds—by some sort of "special need." This special need should be separate from the interests typically associated with the enforcement of the criminal law, the core domain within which the contemporary Fourth Amendment operates and the heartland within which its traditional standard ought to apply.³¹⁹

Second, an adjustment should be warranted only if the state or private interests at issue are uniquely strong or weak. Here too, existing doctrine reflects this insight. Thus, if a court assumes that certain types of cursory searches or seizures ("stops" or "frisks") are in fact substantially less intrusive than more typical police tactics, it might permit those less intrusive measures even if a narrative mosaic is relatively weak. Similarly, a court might permit similar or even more intrusive enforcement tactics on a standard below traditional probable cause if

^{319.} See Maryland v. King, 569 U.S. 435, 466 (2013) (Scalia, J., dissenting) (noting the Court's consistent insistence on "a justifying motive apart from the investigation of crime"); City of Indianapolis v. Edmond, 531 U.S. 32, 42 (2000) (requiring a "primary purpose" distinguishable "from the general interest in crime control"). One implication of this conception of "special needs" is that adjustments to the traditional standard ought not be permitted based solely on the severity of the crime at issue. That is an admittedly contestable position, tentatively endorsed here on administrability grounds. See Bacigal, supra note 9, at 795 (noting the lack of "a viable methodology for ranking the various offenses"); Christopher Slobogin, Why Crime Severity Analysis Is Not Reasonable, 97 IOWA L. REV. BULL. 1, 4 (2012); see also Carroll v. United States, 267 U.S. 132 (1925) (rejecting crime-severity adjustments); cf. Whren v. United States, 517 U.S. 806 (1996); Mincey v. Arizona, 437 U.S. 385, 393 (1978). But see Welsh v. Wisconsin, 466 U.S. 740, 750 (1984); Brinegar v. United States, 338 U.S. 160, 183 (1949) (Jackson, J., dissenting); Amar, supra note 2 at 802; Jeffrey Bellin, Crime-Severity Distinctions and the Fourth Amendment: Reassessing Reasonableness in a Changing World, 97 IOWA L. REV. 1, 13 (2011); LaFave, supra note 92, at 57; Lerner, supra note 3, at 957; Stuntz supra note 281, at 850.

^{320.} See Terry v. Ohio, 392 U.S. 1, 26 (1968). But cf. id. at 16-17 & n.13 (noting the still "serious intrusion" involved in a frisk).

some unique national security or emergency interest is implicated,³²¹ or if a particularly vulnerable population (say, schoolchildren) is involved.³²² In a similar vein, courts might also allow certain wide-scale, profile-driven searches at hit rates well below fifty percent when state interests are compelling and noncriminal—such as the need to ensure the structural integrity of urban dwellings, to promote public health, to enforce immigration laws, or to safeguard public transportation systems.³²³

Finally, adjustments to the default standard of proof should be possible in either direction, as both state and private interests can be either uniquely strong or weak. There should, in other words, be two different adjustments: probable cause *minus*, and probable cause *plus*. Some Supreme Court opinions endorse this conclusion, others reject it—but it is logically inescapable once we accept, per *Terry* and its progeny, that competing state and private interests yield different standards of proof.³²⁴

Of course, a challenging final issue remains: how should any such adjusted standard of proof be defined? Here, again, the ultimate question is one of interest balancing: setting the standard at "probable cause minus" means that *most* of the people searched or seized *will be innocent* but will nonetheless suffer the potentially significant harms associated with such law-enforcement tactics. Striking the right balance thus comes down to answering the question: how many of

^{321.} See Florida v. J.L., 529 U.S. 266, 273-74 (2000) (suggesting "a report of a person carrying a bomb" should be assessed differently than "a report of a person carrying a firearm"); Edmond, 531 U.S. at 44 (noting that a "roadblock set up to thwart an imminent terrorist attack" would "almost certainly" pass muster even while such roadblocks cannot constitutionally be used for a "general interest in crime control").

^{322.} See New Jersey v. T.L.O., 469 U.S. 325 (1985).

^{323.} See Edmond, 531 U.S. at 39 (public highways) (citing Delaware v. Prouse, 440 U.S. 648, 658-61 (1979)); Mich. Dep't. of State Police v. Sitz, 496 U.S. 444 (1990) (same); United States v. Brignoni-Ponce, 422 U.S. 873 (1975) (immigration); Camara v. Mun. Ct. of San Francisco, 387 U.S. 523, 534-37 (1967) (public health and safety codes).

^{324.} See Gooding v. United States, 416 U.S. 430, 465 (1974) (Marshall, J., dissenting) ("I do not regard [interest balancing] as a one-way street, to be used only to water down the requirement of probable cause when necessary to authorize governmental intrusions. In some situations . . . this principle requires a showing of additional justification for a search over and above the ordinary showing of probable cause."); Berger v. New York, 388 U.S. 41, 69 (1967) (Stewart, J., concurring) (arguing that extended electronic eavesdropping should be assessed by "[o]nly the most precise and rigorous standard of probable cause"). In practice, the Court has only "found it necessary . . . to perform the 'balancing' analysis" to require a standard higher than traditional probable cause in "rare" circumstances. Whren, 517 U.S. at 817-18 (offering examples). Schmerber v. California, 384 U.S. 757 (1966), likely comes closest to articulating this higher substantive standard. Id. at 769-70 (requiring "a clear indication that in fact such evidence will be found" for "searches involving intrusions beyond the body's surface") (emphasis added). But see United States v. Montoya de Hernandez, 473 U.S. 531, 540-41 (1985).

those innocent targets should have their privacy or autonomy sacrificed for a greater good? Similarly, setting the standard at "probable cause plus" means that *most* guilty targets will evade search or seizure, at least until additional evidence is independently obtained. Such a standard could thus meaningfully impede enforcement of the criminal law. How many victims or community members impacted by those unsolved or unenforced crimes ought to have *their* interests sacrificed for the greater good?

The surely unsatisfying response to both of these questions is that reasonable people will disagree, and that any admittedly imperfect answer will have to issue from a final decision-maker – in this instance, the courts. Fortunately, though, the task of defining such intermediate standards is no more challenging than the myriad other interest-balancing questions that courts confront when interpreting the Constitution. If anything, conceptualizing these thresholds as two discrete adjustments to a default standard makes that task easier, by narrowing the range of options. For the goal here is simply to identify thresholds that are meaningfully distinct from the traditional anchor, without blurring them into Axis Three's far poles, where (as we will now see) the very idea of a threshold of certainty becomes irrelevant.

C. The Poles

Axis Three's poles correspond to cases in which the validity of a search or seizure is entirely irrelevant to the ultimate guilt or innocence of the target. In other words, it is as if the decision-maker says to herself, "*I don't care* if the government can tell me how likely this search or seizure is to succeed—that is not relevant to whether I will bar it, or permit it." ³²⁸

As a conceptual matter, a decision to embrace such agnosticism is consistent with our analytic framework. The logical end point of an interest-balancing approach is that some searches or seizures may be per se reasonable or unreasonable. Still, exposing the agnosticism inherent in these poles underscores just how rarely, if ever, they should be embraced. After all, defining probable cause at its minimal pole relieves the government of its burden to provide factual arguments

^{325.} Cf. Brown v. Allen, 344 U.S. 443, 540 (1953) (Jackson, J., concurring).

^{326.} See Fallon, supra note 26, at 77-83.

^{327.} *Cf. Montoya de Hernandez*, 473 U.S. at 541 (suggesting that "the creation of a third verbal standard in addition to 'reasonable suspicion' and 'probable cause'" would likely "obscure rather than elucidate").

^{328.} *Cf.* Amar, *supra* note 2, at 801 ("Sometimes 0.1% is more than enough... and other[s] 100% may still be unreasonable.").

and justifications altogether, permitting intrusions on individual liberty even when the benefits are small or nonexistent. Note that the practical effect of such an approach is akin to holding that the challenged state action is not a search or seizure at all, as the Fourth Amendment affords no protection in either event. The only real difference here is that when probable cause is defined at its nadir, the corresponding infringement on individual liberty is more transparent, as there is no hiding the fact that the target's autonomy, dignity, property, or reasonable expectation of privacy has been impaired—without any required showing that the intrusion of those interests was worth it.

On the opposite end of the spectrum, defining probable cause at its maximal extreme amounts to a constitutional doctrine of decriminalization. After all, if the state cannot arrest someone who is unquestionably guilty of an illegal act or cannot obtain evidence necessary to prosecute such an offender, the Fourth Amendment effectively immunizes such conduct from penal sanction. Pegging a probable-cause standard to this extreme pole thus threatens to blur the line between constitutional constraints on the *process* by which the criminal law is enforced and constraints on the *substantive* power of the state to pass such criminal laws in the first place.³³⁰

^{329.} Put another way, the minimal pole treats the magnitude of the state's interests as outweighing the costs of *any* judicial review of the empirical foundations of the state's desired course of action, however slight or deferential that review might be.

^{330.} Josh Bowers thoughtfully argues in favor of such an approach. See Bowers, supra note 2, at 994, 1048 (arguing that "there may be [Fourth Amendment violations] beyond the suspicionless (or suspicion-lite) arrest[,]" including "an arrest unsupported by [a] good reason (or any reason)" other than that the target "was technically legally guilty"); see also Sherry F. Colb, The Qualitative Dimension of Fourth Amendment "Reasonableness," 98 COLUM. L. REV. 1642, 1644-45 (1998) (arguing that probable-cause analysis should consider "the legitimacy of the specific criminal law invoked as a basis" for the search or seizure). My departure from this idea is not with its stated ends-namely, cabining "the coercive and stigmatic" harms of an overly broad criminal law. Bowers, supra note 2, at 994. Nor is it with the idea that some searches or seizures might violate the Fourth Amendment even if the target is clearly guilty. Rather, I would simply view the Fourth Amendment as a tool of last resort, not first resort, when responding to "the overbreadth of prevailing criminal codes." Id. at 1033. My rationale is straightforward: an approach that tries to decriminalize on the back end, by making constitutionally valid laws harder to enforce, seems both less coherent and less likely to succeed than an approach that directly addresses the problems of an overly broad, overly punitive, racially disparate, or irrational penal code. Such direct challenges might include policy-driven decriminalization. Or, if resort to the Constitution is to be had, they might appeal to the substantive doctrines of Due Process, Equal Protection, and the Eighth Amendment. Cf. William J. Stuntz, The Uneasy Relationship Between Criminal Procedure and Criminal Justice, 107 YALE L.J. 1, 66 (1997) (suggesting that constitutional criminal law "has been . . . interventionist in the wrong places"). Of course, those doctrines themselves may not currently be up to the task. But the first-best way to respond to any such defects is to help those frameworks better fulfill their purposes, not to stretch probable cause to fill the gap.

Understood in these terms, it should come as no surprise that Supreme Court cases falling at these polar extremes are few and far between. The Court authorizes truly suspicionless searches in only a narrow set of circumstances—namely, searches of targets crossing the border and searches incident to an otherwise lawful arrest.³³¹ And it is even more stalwart in resisting the opposite pole, holding for the past fifty years that there simply are no searches or seizures that the Fourth Amendment prohibits outright.³³²

As a normative matter, one might quibble with existing doctrine's treatment of either end of this spectrum. Sensible doctrinal frameworks might embrace a few more or a few less suspicionless searches at the nadir. Or they might resurrect some zone at the zenith, where extremely intrusive (or inane) searches or seizures would be barred as per se unreasonable. The point here is not to take an absolutist stand against any one such argument. Rather, it is simply to highlight, as both a conceptual and a practical matter, the inherently destabilizing consequences that would flow from letting the poles of probable cause's third axis come to dominate our conception of the Fourth Amendment – and thus to urge great caution before embracing either extreme.

- 331. The Court sometimes inaptly uses the phrase "suspicionless search" to refer to programmatic searches supported by a *low* probability of success. But as noted *supra* note 81, these searches are not in fact suspicionles at all. For truly suspicionless searches at the border, see *Montoya de Hernandez*, 473 U.S. at 531, 538 (authorizing searches and seizures at the border without "any requirement of reasonable suspicion, probable cause, or warrant"). For suspcionless searches incident to arrest, see *United States v. Robinson*, 414 U.S. 218, 235 (1973) ("The authority to search...incident to a lawful custodial arrest... does not depend on... the probability in a particular arrest... that weapons or evidence would in fact be found...."). Of course, the arrest itself still requires probable cause, which mitigates the "suspicionless" nature of this example. *See id.*; cf. Maryland v. King, 569 U.S. 435, 447-48 (2013) (upholding searches to obtain DNA via a buccal swab of the target's mouth, following the target's otherwise lawful arrest).
- 332. Earlier doctrine grounded in the seminal opinion, *Boyd v. United States*, 116 U.S. 616 (1886), recognized two "zone[s] of privacy": one that could "be invaded . . . on a showing of probable cause," and another that could not be invaded at all, whether "by the police through raids, by the legislators through laws, or by magistrates through the issuance of warrants." Warden v. Hayden, 387 U.S. 294, 313 (1967) (Douglas, J., dissenting); *see also* Gouled v. United States, 255 U.S. 298, 309 (1921) (describing personal papers and effects that were entirely "immune from search and seizure"). The Court abrogated this doctrine in *Warden v. Hayden*, 387 U.S. 294, 309-10 (1967), over fierce objection. *See id.* at 312 (Fortas, J., concurring) ("[T]he Court today needlessly destroys, root and branch, a basic part of liberty's heritage.").

IV. PULLING PLURALISM TOGETHER

To this point, our discussion has taken each of probable cause's analytical axes in isolation, untangling for each one its internal conceptual and normative challenges. For Axis One, we examined how to choose between probabilistic and qualitative modes of assessing evidentiary claims; for Axis Two, we examined how to determine whether a claim proponent is presumptively credible or incredible; and for Axis Three, we examined how to select the appropriate standard of proof for the overarching inquiry.

Note that throughout we have occupied the perspective of the judges who evaluate searches and seizures—not the officers who conduct them. This focus makes sense. The Fourth Amendment's purpose, after all, is "to insure that the deliberate, impartial judgment of a judicial officer will be interposed *between* the citizen and the police, to *assess* the weight and credibility of the information which the [police] officer adduces as probable cause."³³³ It is "the magistrate," in other words, "not the officer, who is to judge the existence of probable cause."³³⁴ Accordingly, probable-cause jurisprudence should be designed, first and foremost, to guide the inquiry of the judicial actor.

Of course, one hopes and expects that the Fourth Amendment's requirements will influence law-enforcement actors as well. Indeed, regulating law-enforcement behavior is one of the primary goals of modern Fourth Amendment doctrine. Such regulation, however, neither requires nor turns on individual police officers' ability to carry around all of Fourth Amendment law in their heads. Their "state of mind . . . is irrelevant to the existence of probable cause." A given officer thus need not personally reason through—or even necessarily understand—the various doctrinal frameworks that "provide the legal justification for [her] action." All that matters is whether "the circumstances, viewed objectively, justify that action." That objective justification is the Fourth Amendment's lynchpin.

^{333.} Wong Sun v. United States, 371 U.S. 471, 481-82 (1963) (emphasis added).

^{334.} Spinelli v. United States, 393 U.S. 410, 423-24 (1969) (White, J., concurring); see also United States v. Ventresca, 380 U.S. 102, 117 (1965) ("[W]hat the police say does not necessarily carry the day; 'probable cause' is in the keeping of the magistrate.").

^{335.} See Crespo, supra note 32, at 2055.

^{336.} Devenpeck v. Alford, 543 U.S. 146, 153 (2004).

^{337.} Whren v. United States, 517 U.S. 806, 813 (1996) (quoting Scott v. United States, 436 U.S. 128, 138 (1978)). Indeed, in many cases, it would be unreasonable to expect her to do so. *Cf.* Nieves v. Bartlett, 139 S. Ct. 1715, 1725 (2019) (noting that police officers sometimes execute searches or seizures "in 'circumstances that are tense, uncertain, and rapidly evolving'" and that call for "quick decisions" (quoting Graham v. Connor, 490 U.S. 386, 397 (1989))).

^{338.} Whren, 517 U.S. at 813 (quoting Scott v. United States, 436 U.S. 128, 138 (1978)).

It is how we ensure that officers acting on their own instincts or intuitions none-theless *behave* in a manner consistent with the governing legal framework.³³⁹ Indeed, if an officer acts pursuant to instincts that do *not* align with the Fourth Amendment's requirements, the officer's instincts are, by definition, misguided—and her actions precisely the ones that judicial remedies are meant to deter.³⁴⁰

Of course, officers' abilities to conform to the Fourth Amendment's requirements will be enhanced if they can comprehend and receive training on what those requirements are. Existing probable-cause jurisprudence, however, fails this basic criterion, as even the Supreme Court concedes: "Given its imprecise nature, officers will often find it difficult to know how the general standard of probable cause applies in 'the precise situation encountered." A better approach would be to "give law enforcement officers significant guidance," which courts could do "by establishing subordinate, presumptive rules for the resolution of recurring fourth amendment issues," all while leaving room for officers' own expertise and common sense judgments where appropriate. 342

That, in essence, is what probable cause's pluralist framework does. It accomplishes this, however, by focusing on the people whose job it is "to judge the existence of probable cause." By enabling those judges to act more clearly and

^{339.} See Crespo, supra note 94, at 239 n.99.

^{340.} Cf. Davis v. United States, 564 U.S. 229, 236 (2011) (describing deterrence as the exclusionary rule's "sole purpose"); Utah v. Strieff, 136 S. Ct. 2056, 2068 (2016) (Sotomayor, J., dissenting) ("[T]he Fourth Amendment does not tolerate an officer's unreasonable searches and seizures just because he did not know any better. Even officers prone to negligence can learn from courts that exclude illegally obtained evidence."). It is tempting to think of a police officer as having some personal stake in the "competitive enterprise of ferreting out crime" and thus to empathize with her when evidence she obtained is suppressed due to her honest mistake. Johnson v. United States, 333 U.S. 10, 14 (1948). Much like a prosecutor, however, a police officer is not "an ordinary party to a [Fourth Amendment] controversy." Berger v. United States, 295 U.S. 78, 88 (1935). She is the embodiment "of a sovereignty . . . whose interest . . . is not that it shall win a case, but that justice shall be done." Id. Thus, if she errs – intentionally, negligently, or otherwise – a potential "criminal goes free . . . but it is the law that sets him free." Mapp v. Ohio, 367 U.S. 643, 659 (1961). And rightly so. See Weeks v. United States, 232 U.S. 383, 393 (1914) ("[E]fforts... to bring the guilty to punishment, praiseworthy as they are, are not to be aided by the sacrifice of those great principles established . . . in the fundamental law of the land.").

^{341.} District of Columbia v. Wesby, 138 S. Ct. 577, 590 (2018) (quoting Ziglar v. Abbasi, 137 S. Ct. 1843, 1866 (2017)); *see also* LaFave, *supra* note 208, at 1190 ("[An] approach . . . consisting largely of an exhortation to use common sense . . . does not afford guidance to police.").

^{342.} Alschuler, supra note 1, at 256.

^{343.} Spinelli v. United States, 393 U.S. 410, 423-24 (1969) (emphasis added).

consistently, the framework alleviates "the policeman's plight" of trying to anticipate what probable cause's "vague standard" demands.³⁴⁴ By the same token, it also emboldens judges to insist that officers actually heed their legal obligations and thus empowers courts to be more meaningful "guardians of the Bill of Rights,"³⁴⁵ "interposed between the citizen and the police."³⁴⁶

To see how probable cause pluralism achieves these objectives in concrete terms, we need to observe how its three axes form a single overarching framework capable of informing actual cases. In so doing, it is helpful to consider such cases from two perspectives: prospectively, as a judge confronted with a given search or seizure, and retrospectively, as someone trying to figure out whether a given body of precedent is coherent.

A. Prospective Assessment: Deciding Future Cases

First, take the prospective view. For a judge considering a warrant application or suppression motion, the pluralist framework offered here has two benefits: it helps to identify "the subsidiary findings they must make in order to arrive at an ultimate finding of probable cause," and it helps to isolate which of those findings are most important in any given case. For in practice, it will be rare that all three of probable cause's axes are equally "at play." Many cases will be straightforward with respect to one or two axes but will be complicated for another. A judge equipped with the framework offered here will thus be able to untangle the different questions that probable cause pluralism brings to the fore, and to cut through an otherwise muddled mélange of issues to focus on what really matters.

To see how this might play out, consider a range of different types of cases, taking Axis One as an organizing guide. Recall that Axis One essentially comprises three types of evidentiary claims: primary and ultimate facts, thin scripts, and narrative mosaics. Once one knows how to tell those claims apart (as Part I laid out) identifying which type of claim is at issue should not be hard. What follows from that identification? Consider the three types of claims in turn.

Primary and ultimate facts are the most straightforward of the trio, as they neutralize the Axis One inquiry: if an evidentiary claim is purely an allegation of

^{344.} Cook, supra note 156, at 317.

^{345.} United States v. Calandra, 414 U.S. 338, 356 (1974) (Brennan, J., dissenting).

^{346.} Wong Sun v. United States, 371 U.S. 471, 481-82 (1963); cf. Amsterdam, supra note 1, at 394 ("If there are no fairly clear rules telling the policeman what he may and may not do, courts are seldom going to say that what he did was unreasonable."); supra text accompanying note 16 (discussing Justice Scalia's similar views).

^{347.} Illinois v. Gates, 462 U.S. 213, 283 (1983) (Brennan, J., dissenting).

a primary and ultimate fact, we need not worry about how to figure out what the facts tell us about the target's culpability, because primary and ultimate facts speak for themselves in that regard. Rather, the key question is whether to treat the allegation as true—or at least, as true *enough* to support a search or seizure. And that question, in turn, breaks down into one main and one subsidiary question, which respectively track Axis Two and Axis Three of the framework.

The central Axis Two question is whether the person making this claim is presumptively credible or presumptively incredible. That presumption is a function of two related considerations: the claim proponent's baseline credibility and the presence or absence of any additional safeguards that might bolster that baseline if it is deficient.³⁴⁸ Thus, if the person asserting the claim is a civilian witness who says, "that person just robbed me," the claim should (as a matter of law) be treated as presumptively true.³⁴⁹ If, instead, the proponent is a police officer who says, "I saw the suspect throw a joint on the ground," the claim should presumptively be considered true *unless* the decision-maker is aware of red flags indicating a "testilying problem" with this particular officer or her department. In that case, the claim is presumptively untrue – unless the government has taken sufficient steps to counteract such problems.³⁵⁰ Finally, if the claim proponent is a confidential informant or an anonymous witness, the claim is presumptively not true, although that presumption might once again be weakened if the government takes steps to mitigate the inherent bias and accountability problems with such witnesses.351

Note, however, that while identifying the presence or absence of such a presumption is the primary consideration for this set of cases, it is not the only consideration. The decision-maker still has to decide whether the presumption is overcome. And that will be a function of both the presumption's intensity and the standard of proof. The intensity of the presumption is still an Axis Two question, as credibility baselines fall along a spectrum. For example, an unrecorded allegation from an anonymous tipster should presumptively be *less* credible than an allegation made by an officer in a department with a rampant and unaddressed testilying problem—even though both might be presumptively unreliable. The standard of proof, however, also impacts the weight of the presumption, which helps determine how "sticky" the presumption ought to be. Thus, if the standard of proof is the traditional probable-cause standard (preponderance of the evidence), the government will (and should) have to present compelling case-spe-

^{348.} See supra Part II.

^{349.} See supra Section II.A.

^{350.} See supra Section II.B.

^{351.} See supra Sections II.C-D.

cific evidence to overcome the adverse presumption. That burden will be less onerous, however, if the standard of proof is lower than traditional probable cause. Conversely, a defendant will (and should) have a much harder time overcoming a presumption of credibility when the standard of proof is low than when it is high. In practice, then, a civilian who says "that person just robbed me" should virtually always provide a sufficient basis for a *Terry* stop of the person so identified; and her claim should frequently be enough to support an arrest of the person as well, so long as there are no case-specific reasons to doubt the civilian's claim — reasons that will need to be more compelling for the stop than for the arrest. Similarly, if an officer has an unaddressed testilying problem, an arrest should be deemed unconstitutional if it is based exclusively on her claim that she saw a suspect "drop a joint." By contrast, a *Terry* stop conducted under such circumstances will (and should) be a closer call, with the officer's adverse credibility presumption playing a less decisive role in the overarching assessment. 353

Once we have mapped the analysis for primary and ultimate facts, we are a long way toward mapping the analysis for narrative mosaics. The Axis Two analysis, after all, is much the same for both types of evidentiary claims, either of which can be made by the full range of potential claim proponents. With narrative mosaics, however, the Axis One inquiry now looms large, as the mosaic itself must be assessed. As explained earlier, that inquiry contains two primary components. First, there is the question of deference: do the law-enforcement officers involved in the case have a degree of expertise superior to the judge making the decision? The answer to that question turns on those specific officers' experiences and their potential biases, which the decision maker has to assess. Second, the judge must apply her own independent expert judgment to the narrative mosaic in a holistic, qualitative fashion.

^{352.} See supra note 218 (noting cases in which a civilian's presumption might be overcome).

^{353.} *But cf.* LaFave, *supra* note 92 (discussing potential substantive problems with stop and frisk independent of the Fourth Amendment inquiry).

^{354.} See supra Section I.B.

³⁵⁵. *See supra* Section I.B.3.

^{356.} Note that sometimes, a narrative mosaic might contain within it (as one of its "tiles") a thin script, in which case it presents a "true mixed claim," which should be analyzed as described in Section I.C.1. Similarly, sometimes a narrative mosaic might contain a "tile" that is a primary and ultimate fact. In such an instance, the decision-maker should begin by assessing the primary and ultimate fact, for if that fact alone is sufficient, the more complicated assessment of the mosaic need not be conducted. *Cf.* Underwood, *supra* note 40, at 1424 (noting the relatively high cognitive costs of the qualitative method). If, however, the primary and ultimate fact is *insufficient*, then the decision-maker should assess the remainder of the narrative mosaic to see if it is independently suggestive of criminal activity, with the (insufficient) primary and

to the standard of proof, with Axis One and Axis Three combining to yield the ultimate question: having considered the narrative proffered by the government, does the decision-maker believe, strongly believe, or simply suspect that the target is in fact implicated in the illegal act at issue?³⁵⁷

In contrast to primary and ultimate facts and narrative mosaics, thin scripts present a different set of issues. By their nature, these claims will typically intersect Axis One and Axis Two at "fixed points." For when an evidentiary claim is a thin script (Axis One) it is almost always presented by a law-enforcement officer (Axis Two). After all, the most common types of thin scripts—mechanical searches and profiles—are *tools* that law-enforcement officers use to identify potential lawbreakers. Probabilistic claims are thus generally presented to courts when the state's own agents have deployed such tools to support a search or a seizure.

Building on this observation, the assessment of a thin script—say, a search of a car based on an alert from a drug-sniffing dog—quickly separates into three discrete issues, two of which are preliminary questions posed by Axes One and Two, and the third of which is the central question posed by Axis Three. The first preliminary issue concerns the credibility of the underlying factual signal (Did the dog really bark?), which is the same Axis Two question about the officer's credibility described and analyzed above. The second preliminary issue is the Axis One question: how reliable is the dog? As discussed above, answering this question requires the decision—maker to assess the dog's hit rate. See Note, however, that while the practical cost to the government of presenting such information may initially be high, once the data is assembled and analyzed it should not be hard for the decision—maker to determine what the hit rate actually is. Ather, the real conceptual work for the judge in assessing a thin script comes at Axis Three, which asks: "What hit rate is high enough to justify the challenged search or seizure at issue?"

- ultimate fact playing at most a supporting or bolstering role in the analysis. *See supra* text accompanying notes 259-276 (discussing corroboration).
- 357. The degree of certainty is determined by the applicable standard of proof. *Cf.* Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364, 370-71 (2009) ("[T]he best that can be said generally about" reasonable suspicion is that it entails "a moderate chance of finding evidence of wrongdoing"); Simmons, *supra* note 13 at 989 (defining reasonable suspicion as "something seems not right about this situation").
- **358.** Similarly, in a profile case, the question is whether the target *in fact* satisfied the profile.
- 359. See supra Section II.A.
- **360.** See Underwood, *supra* note 40 at 1424 ("A statistical system . . . requires less skill and less time from its decisionmakers; the major costs of a statistical system arise at the level of collecting and analyzing data and designing the system, rather than administering it.").

That, of course, is the central interest-balancing question underlying the standard of proof, restated here in probabilistic terms. And as noted in Part III, the answer to that question will and should vary across different types of cases. Indeed, in the *unique* context of thin scripts and probabilistic analyses, it would not be unreasonable for a court to allow the range of potential thresholds to vary even beyond the three presumptive zones of probable cause identified earlier.³⁶¹ After all, if administrability is the driving concern, it will be just as easy for a judge to tell whether a hit rate is above one number or another. Courts might thus reasonably decide that certain categories of searches or seizures require a five percent hit rate, others fifteen percent, others thirty-five percent, and so on. 362 Whether to embrace this added degree of pluralism presents the same conceptual tradeoffs discussed in Part III – namely, how much normative precision to sacrifice for doctrinal simplicity and administrability.³⁶³ The key point, however, is that this is where the action lies for thin-script analysis: figuring out precisely how probable is probable enough and then insisting that the government support its fundamentally probabilistic claims with probabilistic proof.

Finally, in a rare set of cases, the government or the defendant may argue that the likelihood of the target's involvement in illegal behavior is ultimately beside the point—that the search or seizure should be barred *even if* the target is concededly guilty or that it should be permitted *irrespective* of its likelihood of success. In some sense, these cases are the simplest—and in another, perhaps the hardest. For instead of engaging Axis One and Axis Two, they pose only a single question: whether those axes should be sidelined altogether, such that the search or seizure is either reasonable or unreasonable per se, regardless of its factual underpinnings. That is the Axis Three question *in extremis*: are the government's interests so strong (and perhaps the intrusion so minimal) that courts should entirely forgo judicial review of the factual basis for the search or seizure? Or, alternatively, is the intrusion so severe (or so absurd) that it should be considered unreasonable as a matter of law, even if it will likely turn up evidence of illegal

^{361.} See supra Sections III.A-B. (describing traditional probable cause, probable cause plus, and probable cause minus).

^{362.} Compare Navarette v. California, 572 U.S. 393, 410 (2014) (Scalia, J., dissenting) (proposing a 5% or 10% threshold for traffic stops in drunk driving cases), and Mich. Dept. of State Police v. Sitz, 496 U.S. 444, 455 (1990) (upholding drunk-driving checkpoints with a 1.6% detection rate), with McCauliff, supra note 13, at 1328 (reporting based on a survey of 164 judges that the modal definition of "reasonable suspicion" corresponds to a 30% threshold (49 responses), with other top contenders being 10% (24), 20% (33), 40% (21), and 50% (23)).

^{363.} Cf. Amsterdam, supra note 1, at 376 ("If a flexible set of graduated responses is what is wanted, why not recognize simply the principle that . . . two-minute street detentions are allowable upon a 37 percent probability of criminality, four-minute street detentions are allowable upon a 39 percent probability of criminality, and so on.") (sarcasm in original).

activity? As noted above, cases in which the answer to either of these questions ought to be yes are few and far between, but they may well exist.³⁶⁴

B. Retrospective Assessment: Evaluating Existing Doctrine

The discussion to this point has considered probable cause's analytical framework from the perspective of a judge evaluating a case. And as that discussion shows, a connective insight ties probable cause's three axes together: each axis is essentially an independent variable that goes into the overarching assessment. If one were to approximate the relationship between the three axes formulaically, one could thus imagine each axis as producing a value between zero and one and then posit that *a search or seizure is constitutional if and only if*:

Axis One • Axis Two > Axis Three, or

(strength of the claim) • (reliability of the claim) > (threshold of certainty).

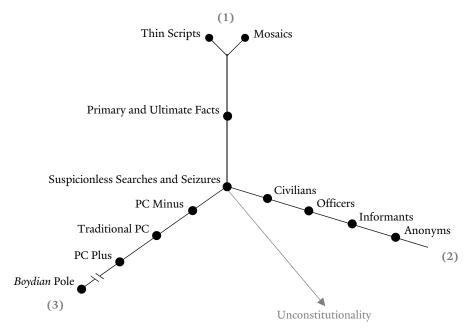
The basic intuition here is straightforward: the relationship between the axes is such that as the government's case becomes stronger (i.e., as the evidentiary claim becomes stronger or more reliable), the values of Axis One and Axis Two increase. Conversely, as the threshold of certainty increases in value (because the standard of proof becomes more demanding), the government's case becomes harder to sustain.³⁶⁵

For the visually inclined, this insight allows us to combine the various schematics set forth throughout the Article (in Figures One, Two, and Three) into a single, integrated visual framework:

^{364.} See supra Section III.C.

^{365.} By way of illustration, a primary and ultimate fact would (by definition) be valued 1 for Axis One in the equation. *See supra* notes 44-46 and accompanying text. Similarly, the typical civilian witness would presumptively have a value of, say, .95. *See supra* Section II.A. *But cf. supra* notes 216-218 and accompanying text. Thus, a primary and ultimate fact proffered by a civilian witness would be sufficient to support a search or seizure in virtually all cases — unless the certainty threshold is set at its maximal pole.

FIGURE 4.
PICTURING PROBABLE CAUSE PLURALISM



The core idea here is that probable cause's three axes unite to form a three-dimensional space, much like what one would see when peering into the corner of a box. The vertical axis is Axis One, followed clockwise by Axis Two, and then Axis Three. Each axis is notched by its corresponding categories, as set out in Figures 1-3. And they are arranged directionally so that the strength of the government's case gets weaker the further one moves from the vertex at the corner of the box. The figure thus creates a space within which one can plot any given search or seizure by imagining that search or seizure as a bubble that intersects each axis at one (and only one) of the nodes on each axis. The bigger the bubble gets, the more likely it is to burst—that is to say, the more likely it is that the search or seizure will (and should) be deemed unconstitutional.³⁶⁶

^{366.} Note the role of Axis Three's poles: truly suspicionless searches are located precisely at the vertex, as these searches and seizures are always constitutional (and do not engage Axis One or Axis Two). See supra Section III.C. Similarly, Axis Three is marked with a "breaking point" before it reaches the "Boydian Pole," where searches and seizures are per se unreasonable (the bubble always "pops" if it extends that far). See supra note 332; (discussing Boyd v. United States, 116 U.S. 616 (1886)). Note also that Axis One forks into two prongs to indicate the different methodological paths (probabilistic and qualitative) that correspond to thin scripts and narrative mosaics, neither of which is inherently "stronger" or "weaker" than the other.

With this framing in mind, we can now visually depict the various sets of cases that this Part assessed earlier.

FIGURE 5.
PRIMARY AND ULTIMATE FACTS

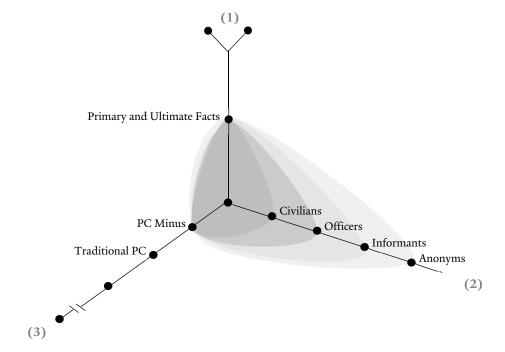


FIGURE 6.
NARRATIVE MOSAICS

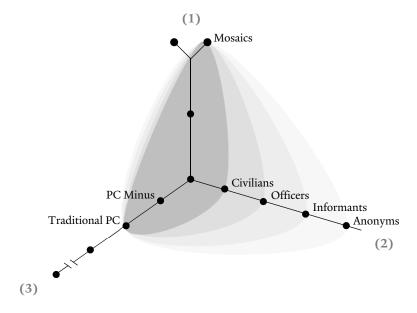
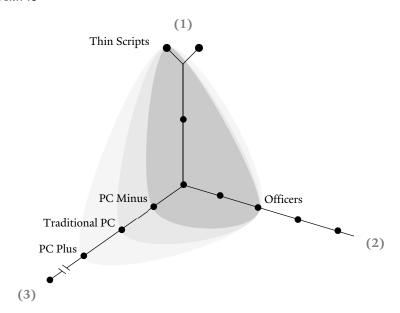


FIGURE 7.
THIN SCRIPTS



As suggested earlier, and as captured now in Figure 5, the main driver when assessing primary and ultimate facts is the credibility of the claim's proponent. Accordingly, the bubbles associated with these cases stretch out along Axis Two. ³⁶⁷ In Figure 6, the shift from primary and ultimate facts to narrative mosaics expands each of the bubbles vertically, reflecting the relative evidentiary weakness of narrative mosaics as compared to primary and ultimate facts—and the added significance of the Axis One inquiry. Finally, thin scripts turn much more on the threshold of certainty, which is why the focus in Figure 7 shifts from Axes One and Two to Axis Three.

Nonvisual learners may find these sketches unhelpful. They demonstrate, however, an important point: a pluralist framework not only helps judges decide cases in the future but also provides a tool to assess cases that have been decided in the past. To say that a "bubble is small" on these schematics is simply to say that a judicial decision rejecting such a search or seizure should be viewed as a significant outlier—one that is suspect and likely incorrect. Similarly, a decision upholding a search or seizure at the edges of the schematic should seem equally suspect. Lastly, intermediate cases (the medium-sized bubbles) should be viewed as harder cases, with respect to which reasonable minds can and will disagree. Even here, however, the framework provides a yardstick by which to assess whether a decision-maker approaches those hard cases consistently, by recognizing that *relatively* stronger or weaker cases should be treated as such.

In short, a properly conceived pluralist framework offers a tool to identify those probable-cause precedents that resonate with that framework, those that are in tension with it, those that might have been decided better if decided differently, and those that might have been decided better if grounded in different reasoning. In so doing, a pluralist framework helps to bring a little more order, structure, and coherence to an otherwise amorphous body of law. Indeed, with this understanding in hand, we can now apply probable cause pluralism's analytical framework to the Supreme Court's entire probable-cause canon, from its first probable-cause case in 1813 to its most recent in 2018. Many of the insights gleaned from that exercise have already been woven into the discussion throughout this Article. In an effort to distill those analyses and to promote further engagement along these lines, this Article's Appendix catalogs the Supreme Court's full probable-cause canon, situating each case along probable cause pluralism's three axes and noting points of congruence or tension with the framework. ³⁶⁸

^{367.} Note, however, that the analysis will also be impacted by whether the challenged search or seizure is assessed by a lower standard of proof (as shown in the figure) or by the more traditional standard. The latter standard would expand each bubble outward, thus reflecting the incrementally weaker nature of the government's case.

^{368.} See infra Appendix.

The goal of that catalog—and of this project—is to look both forwards and backwards. For if the analytic framework presented here is ever to have any prospective value, there will first need to be some retrospective revision. After all, one of the central challenges impeding probable cause pluralism's adoption is the Supreme Court's frequent invocation of probable cause unitarianism. Blinded by that conception of its own work, the Court has discouraged lower courts from embracing the very pluralism that its own probable-cause canon haphazardly reflects. The result, at least facially, is a doctrinal muddle that chafes against our understandings of the rule of law and disables courts from safeguarding civil liberties in the face of competing law-enforcement demands.

By excavating probable cause's latent pluralism and reconstructing it in a more coherent and systematic framework, this project addresses both of these concerns. As the discussion in this Part has shown, it presents a conceptual account that is more structured, more predictable, and more likely to yield consistent results. In short, it presents a more law-like law of search and seizure. By the same token, it has also made Fourth Amendment law more rigorous and thus more protective of the privacy, autonomy, and security interests of search-and-seizure targets. In a world governed by probable cause pluralism, fundamentally probabilistic claims must be proven, not simply assumed valid;³⁶⁹ law-enforcement deference must be earned, not simply granted as a matter of course;³⁷⁰ credibility problems impacting certain types of witnesses must be acknowledged and corrected, not simply ignored;³⁷¹ and excessively intrusive or pointless searches and seizures must be specially justified, not simply assessed in the ordinary course.³⁷²

CONCLUSION

Sixty years ago, Justice Robert Jackson described the Fourth Amendment's place in our constitutional order.

These, I protest, are not mere second-class rights but belong in the catalog of indispensable freedoms. Among deprivations of rights, none is so effective in cowing a population, crushing the spirit of the individual and putting terror in every heart. Uncontrolled search and seizure is one of the first and most effective weapons in the arsenal of every arbitrary government. And one need only briefly to have dwelt and worked among a

^{369.} See supra Section I.A.

^{370.} See supra Section I.B.3.

^{371.} See supra Part II.

^{372.} See supra Sections III.B-C.

people possessed of many admirable qualities but deprived of these rights to know that the human personality deteriorates and dignity and self-reliance disappear where homes, persons and possessions are subject at any hour to unheralded search and seizure by the police.

But the right to be secure against searches and seizures is one of the most difficult to protect. Since the officers are themselves the chief invaders, there is no enforcement outside of court.³⁷³

Justice Jackson's "protest" came in a dissenting opinion in *Brinegar v. United States*, the first opinion to hold that "[t]he rule of probable cause is a practical, nontechnical conception."³⁷⁴ Forty years later, the Court made that claim the centerpiece of its purportedly unitary "totality-of-the-circumstances approach," which has stymied Fourth Amendment jurisprudence ever since.³⁷⁵ And yet, as an earlier Court, also quoting *Brinegar*, once explained, "[t]he history of the use, and not infrequent abuse, of the power to arrest cautions that a relaxation of the fundamental requirements of probable cause would 'leave law-abiding citizens at the mercy of the officers' whim or caprice."³⁷⁶

One way that such a relaxation occurs is through the intentional dilution of the amendment's protections. But those protections may also slide away because, in an effort to make probable cause mean everything at once, those entrusted with its enforcement have made it so vague as to mean almost nothing at all. The motivation for that relaxation may have been pure: to devise a doctrinal approach so infinitely flexible that it can respond to any one of the myriad and varied law-enforcement-civilian interactions that occur every day. There is, however, another way. Probable cause might be reimagined to mean something not by forcing it to mean any one thing in every case, but by allowing it to mean many things at once—to embrace a set of concepts and ideas that combine into a legal framework supple and substantive enough to meet the varied tasks at hand. If such a grand unified theory of the Fourth Amendment's protections is to be had, it cannot be a unitary theory. It must, instead, embrace the promise of probable cause's pluralism.

^{373.} Brinegar v. United States, 338 U.S. 160, 180-81 (1949) (Jackson, J., dissenting).

^{374.} Id. at 176 (majority opinion).

^{375.} Illinois v. Gates, 462 U.S. 213, 230-31 (1983) (quoting *Brinegar*, 338 U.S. at 176); *see also* Florida v. Harris, 568 U.S. 237, 244 (2013) (invoking both *Brinegar* and *Gates*).

^{376.} Wong Sun v. United States, 371 U.S. 471, 479 (1963).

APPENDIX

This Appendix catalogs the Supreme Court's probable-cause canon and situates that canon within this Article's analytic framework. It aspires to capture every case in which the Supreme Court has assessed the substantive constitutionality of a challenged search or seizure.³⁷⁷ Some examples will surely have slipped through the cracks. And, of course, many more will emerge over time. Still, with ninety-five cases, the collection is the most robust accounting to date of the Supreme Court's multicentury effort to give meaning to the phrase "probable cause" and thus to the Fourth Amendment itself.

The cases are listed in chronological order, with the authoring Justice identified parenthetically. The underlying suspected offense and the Court's ultimate probable-cause holding are listed in the final two columns, with the probable-cause holding described as either "valid" or "invalid." ³⁷⁸

The table's three middle columns correspond to the three analytic axes developed in this Article. Within each column, the table assigns a code that corresponds to the relevant axis's constitutive categories. Thus, the column for Axis One codes each case as a "primary and ultimate fact," a "thin script," a "narrative mosaic," or a "mixed claim." The column for Axis Two in turn notes whether

- 377. The term "canon" is thus used here broadly to refer to a "body of related works," Canon, MERRIAM-WEBSTER'S DICTIONARY, https://www.merriam-webster.com/dictionary/canon [https://perma.cc/X7GA-FBKR], and not to the subset "of greatly authoritative texts that... shape the nature and development of [the] law," Richard A. Primus, Canon, Anti-Canon, and Judicial Dissent, 48 DUKE L.J. 243, 243 (1998). The Appendix does not include cases that turn on the warrant requirement, the exclusionary rule, or on threshold questions of whether a search or seizure occurred.
- 378. Note that the probable-cause holding may differ from the ultimate holding of the case regarding the constitutionality of the search or seizure. For example, if the Court concludes that there *was* probable cause but that the search was unlawful because it was conducted without a warrant, the case will be coded as "valid" for purposes of this Appendix. Similarly, the offense column describes the suspected offense upon which the search or seizure was predicated—not the ultimate offense of arrest or conviction. Thus, if the police pull someone over on suspicion of drunk driving and, in the course of the stop, find drugs, the case will be coded as "DUI."
- 379. See supra notes 46, 49, 129 & 169 and accompanying text (defining these terms). As noted in Section I.C.1, some claims may technically be "mixed" but may also be heavily lopsided: a narrative mosaic, for example, may contain only a single and barely relevant thin-script tile; conversely, a thin script may be accompanied by a small flourish of additional facts that add little to the central quantitative claim at issue. Employing the analytic approach described in Section I.C.1, the Appendix generally classifies such cases based "on the load-bearing and potentially dispositive aspect of the claim." Supra text accompanying note 171. It reserves the label "mixed claim" for cases in which "double-barreled reasoning" would meaningfully ad-

the claim proponent was a "civilian," an "officer," a "confidential informant," or an "anonym." Finally, the column for Axis Three notes whether the applicable standard of proof is "traditional probable cause," probable cause "plus" or "minus," or one of Axis Three's polar extremes.³⁸¹

Note that the codes assigned here are those that one would assign if one were to apply the framework set forth in this Article. They do not describe the reasoning that the Court actually employed in the corresponding opinion. Such reasoning, of course, almost never adopts the language or reasoning of probable cause pluralism expressly. Indeed, as discussed in this Article, the Court's reasoning frequently departs from that framing. Some of those departures are described in notes accompanying the table below. Where helpful, notes also offer clarifying explanations about the cases and their analyses.

vance the claim's assessment, *supra* text accompanying note 172, or for cases in which the government, as the party bearing the burden of proof, affirmatively employs both qualitative and quantitative reasoning, *cf. supra* text accompanying notes 175-176.

^{380.} See supra Part II.

^{381.} See supra Part III. The Appendix assigns the codes "PC Plus," "PC Minus," and "Suspicionless Pole" based on the criteria that the Supreme Court has recognized as justifying such departures from "traditional probable cause." See supra Sections III.B & III.C. It does not express a view as to whether additional or different types of cases ought to merit similar adjustments or polar treatments. The Appendix does, however, include two cases—Boyd v. United States, 116 U.S. 616 (1886), and Gouled v. United States, 255 U.S. 298 (1921)—as examples of the nowabandoned "Boydian pole," at which a search or seizure would be deemed invalid regardless of the strength of the underlying evidence. See supra notes 328-332 and accompanying text.

TABLE A1.
THE PROBABLE-CAUSE CANON

Case	Axis One	Axis Two	Axis Three	Offense	Holding
Locke v. United States, 11 U.S. (7 Cranch) 339 (1813) (Marshall, C.J.) ³⁸²	Narrative Mosaic	Officer ³⁸³	PC Minus (customs) ³⁸⁴	Smuggling	Valid
The George, 10 F. Cas. 201 (C.C.D. Mass. 1815) (No. 5,328) (Story, Circuit J.) ³⁸⁵	Mixed Claim ³⁸⁶	Civillian	PC Minus (customs) ³⁸⁷	Smuggling	Valid

- 382. The Court's analysis in *Locke* does not directly interpret the Fourth Amendment but rather construes the phrase "probable cause" as it appeared in the federal customs statute applicable at the time. *See* 11 U.S. (7 Cranch) 339, 341 (1813) (quoting An Act to Regulate the Collection of Duties on Imports and Tonnage § 71, 1 Stat. 627, 678 (1799)). *Locke*, however, is cited as a foundational probable-cause precedent in later Fourth Amendment cases. *See*, *e.g.*, Brinegar v. United States, 338 U.S. 160, 175 (1949).
- **383.** As noted above, the relative positioning of claim proponents within Axis Two's credibility hierarchy "can change over time." *Supra* note 206. The fact that a claim proponent was a state agent (an "officer") may accordingly have different implication for the Axis-Two inquiry prior to the rise of modern police forces and contemporary testilying concerns. *See supra* Section II.B.2.
- **384.** This opinion predates *Camara v. Municipal Court*, 387 U.S. 523 (1967), and *Terry v. Ohio*, 392 U.S. 1 (1968). Accordingly, it does not expressly endorse a variable probable cause standard. *Cf. supra* notes 292-295 and accompanying text (discussing *Camara*); *cf. supra* notes 311-318 and accompanying text (discussing *Terry*).
- **385.** Justice Story issued this opinion as a circuit justice. The case considers the meaning of the phrase "probable cause" in the context of an admiralty dispute, not under the Fourth Amendment. It is, however, cited as instructive in subsequent Fourth Amendment cases. *See, e.g.*, Carroll v. United States, 267 U.S. 132, 161 (1925).
- 386. The seizure of the ship in question was premised on five enumerated facts. See 10 F. Cas. at 202. One was a straightforward thin script: the seized ship was "out of [its] proper course for the Port of New Bedford." *Id.* But the seizure was also premised on a series of facts that together constituted a mosaic: The ship's crew had attempted to "deceive" potential observers by pretending the ship had sprung a leak; false shipping registers, logbooks, and registers were found on board, suggesting a "fictitious voyage"; and one of the passengers concealed suspicious documentation that was found only after "a personal search was made of him." *Id.*
- **387.** As noted *supra* note 315, Justice Story uses the phrases "probable cause" and "reasonable suspicion" interchangeably in this opinion, employing them as synonyms for a common standard. The opinion, however, predates the Court's adoption of the variable probable-cause standard, *see supra* note 384, and does not expressly endorse such an approach.

The Thompson, 70 U.S. (3 Wall.) 155 (1865) (Davis, J.) ³⁸⁸	Narrative Mosaic	Civilian	PC Minus (customs) ³⁸⁹	Smuggling	Valid
Boyd v. United States, 116 U.S. 616 (1886) (Bradley, J.)	n/a	n/a	<i>Boydian</i> Pole (private papers)	Smuggling	Invalid
Gouled v. United States, 255 U.S. 298 (1921) (Clarke, J.)	n/a	n/a	<i>Boydian</i> Pole (private papers)	Fraud	Invalid
Carroll v. United States, 267 U.S. 132 (1925) (Taft, C.J.)	Narrative Mosaic	Officer	Traditonal PC	Liquor	Valid
Steele v. United States, 267 U.S. 498 (1925) (Taft, C.J.)	PU Fact	Officer	Traditonal PC	Liquor	Valid
Dumbra v. United States, 268 U.S. 435 (1925) (Stone, J.)	PU Fact	Officer	Traditonal PC	Liquor	Valid
Husty v. United States, 282 U.S. 694 (1931) (Stone, J.)	PU Fact	Informant	Traditonal PC	Liquor	Valid
Grau v. United States, 287 U.S. 124 (1932) (Roberts, J.)	Thin Script ³⁹⁰	Officer	Traditonal PC	Liquor	Invalid

^{388.} This case considers the meaning of the phrase "probable cause" in the context of an admiralty dispute, not under the Fourth Amendment. It is, however, cited as instructive in subsequent Fourth Amendment cases. *See, e.g.*, Carroll v. United States, 267 U.S. 132, 161 (1925).

^{389.} This opinion predates the Court's adoption of the variable probable cause standard, *see supra* note 384, and does not expressly endorse such an approach.

^{390.} The sole issue in this case was whether there was probable cause to believe that a given building was being used "for the *unlawful sale* of intoxicating liquor." 287 U.S. at 127 (emphasis added). Based on the government's proffered narrative mosaic, the Court accepted that the building was used to *manufacture* liquor. *See id.* at 127-28. But it went on to reject the thinscript claim that "manufactory . . . *alone* [creates] probable cause for believing that actual sales [were being] made." *Id.* at 128-29 (emphasis added).

Nathanson v. United States, 290 U.S. 41 (1933) (McReynolds, J.)	n/a ³⁹¹	Officer	Traditonal PC	Liquor	Invalid
Scher v. United States, 305 U.S. 251 (1938) (McReynolds, J.)	Narrative Mosaic ³⁹²	Officer ³⁹³	Traditonal PC	Liquor	Valid
United States v. Di Re, 332 U.S. 581 (1948) (Jackson, J.)	Thin Script	Officer ³⁹⁴	Traditonal PC	Fraud	Invalid

- 391. In this case, an officer asserted that contraband was at the location targeted for a search. 290 U.S. at 44. Facially, this would appear to be an assertion of a primary and ultimate fact. But as the Court correctly noted in the course of holding the search invalid, the officer's assertion was in truth "a mere affirmation of suspicion and belief without *any* statement of adequate supporting facts." *Id.* at 46 (emphasis added). The claim was thus not an assertion of a primary and ultimate fact but rather a conclusory assertion that there was probable cause. *Cf. supra* text accompanying note 45 ("[Primary and ultimate fact] claims arise whenever a witness reports that she has *directly observed X* person commit *Y* offense or has *directly observed* evidence of *Y* offense in location *Z*.").
- **392.** In addition to the narrative mosaic set out in the opinion, the target of the search and seizure confessed to "hauling bootleg liquor." **305** U.S. at **253**. This statement would ordinarily render the evidentiary claim a primary and ultimate fact. The statement was made, however, only after the investigating officer had "followed" the target "within the curtilage" of his residence, *id.*, at which point the relevant search had already commenced. *See* Collins v. Virginia, **138** S. Ct. **1663**, **1670** (2018).
- 393. In addition to the narrative mosaic offered by the arresting officer, this case also involved a more direct assertion of a primary and ultimate fact by a confidential informant. See 305 U.S. at 253. The government, however, disclaimed any reliance on the informant's tip, and the Court accordingly based its ruling only upon "what took place in [the officers'] presence." *Id.* at 254. See supra note 256 (observing that officers may conduct investigations based on anonymous tips in ways that do not implicate the Fourth Amendment).
- 394. In this case, a civilian witness asserted that a crime had been committed by a person sitting *next to* the defendant, who challenged his ensuing arrest. (The civilian was a police informant whose identity was disclosed during the proceedings.) Thus, while a witness asserted a primary and ultimate fact with respect to another individual, the search of the defendant himself turned on a single fact observed by the officers: "All they had was his presence" in the car. 332 U.S. at 592.

Johnson v. United States, 333 U.S. 10 (1948) (Jackson, J.)	Narrative Mosaic / Thin Script ³⁹⁵	Informant / Officer	Traditonal PC	Narcotics	Valid / Invalid ³⁹⁶
Trupiano v. United States, 334 U.S. 699 (1948) (Murphy, J.)	PU Fact	Officer	Traditonal PC	Liquor	Valid
Brinegar v. United States, 338 U.S. 160 (1949) (Rutledge, J.)	Narrative Mosaic	Officer	Traditonal PC	Liquor	Valid
United States v. Rabinowitz, 339 U.S. 56 (1950) (Minton, J.)	PU Fact	Informant / Officer ³⁹⁷	Traditonal PC	Fraud	Valid
Giordenello v. United States, 357 U.S. 480 (1958) (Harlan, J.)	n/a ³⁹⁸	Informant	Traditonal PC	Narcotics	Invalid

- 395. In this case, the Court assessed two different Fourth Amendment events: an entry into a hotel room (a search) and an arrest of the person who opened the door for the police (a seizure). The former was deemed supported by probable cause on the basis of a narrative mosaic: an informant had told the officer that he had smelled narcotics in the hallway of a hotel; the officer, too, had noticed the smell of narcotics emanating from a room in the same hallway; and the officer had heard "shuffling or noise" after knocking on the door. 333 U.S. at 12. But see id. at 15 (holding the search was unlawful because the officer lacked a warrant). The arrest of the woman who opened the door, however, was held invalid, because the officers did not know at the time of the arrest how many other people might have been in the room and thus did not know the denominator for the "logical-circumstances" claim that the woman who opened the door had possessed the narcotics at issue. Id. at 15-16. Cf. supra text accompanying notes 50-52 (discussing logical-circumstances thin scripts) and notes 113-115 and accompanying text (discussing Maryland v. Pringle, 540 U.S. 366 (2003)).
- **396**. See supra note 395.
- 397. In this case, an officer directly purchased contraband from the person who was arrested. The officer's name is not stated in the opinion but was reported in the record and briefing, so the officer was not himself a confidential informant. *See, e.g.*, Brief for the Petitioner at 5, United States v. Rabinowitz, 339 U.S. 56 (1950) (No. 293). The officer did, however, speak with a confidential informant who asserted that he had supplied contraband to the target of the arrest (an additional assertion of a primary and ultimate fact).
- 398. In this case, the officer asserted that contraband was at the location targeted for a search. 357 U.S. at 481. Facially, this would appear to be an assertion of a primary and ultimate fact. But as the Court correctly noted in the course of holding the search invalid, the officer's assertion contained "no affirmative allegation that [he] spoke with personal knowledge [nor did it] indicate any sources for [his] belief." *Id.* at 486. The claim was thus not an assertion of a

Draper v. United States, 358 U.S. 307 (1959) (Whittaker, J.)	PU Fact	Informant 399	Traditonal PC	Narcotics	Valid
Henry v. United States, 361 U.S. 98 (1959) (Douglas, J.)	Narrative Mosaic	Officer	Traditonal PC	Theft	Invalid
Jones v. United States, 362 U.S. 257 (1960) (Frankfurter, J.)	PU Fact	Informant	Traditonal PC	Narcotics	Valid
Rios v. United States, 364 U.S. 253 (1960) (Stewart, J.)	Thin Script	Officer	Traditonal PC	Narcotics	Invalid
Wong Sun v. United States, 371 U.S. 471 (1963) (Brennan, J.) ⁴⁰⁰	PU Fact	Civilian	Traditonal PC	Narcotics	Invalid
Ker v. California, 374 U.S. 23 (1963) (Clark, J.) (plurality)	Narrative Mosaic	Informant / Officer	Traditonal PC	Narcotics	Valid

primary and ultimate fact, but rather a tautological assertion of the conclusion that there was probable cause. *See supra* note 391.

^{399.} The civilian in this case was a police informant whose identity was disclosed only after his death, such that at the time he proffered his information he was a confidential informant. 358 U.S. at 309-10. *See supra* Section II.C (discussing concerns relating to quasianonymous claim proponents).

^{400.} This case involves a complicated and interlocking series of Fourth Amendment events. Only two, however, were directly assessed for their substantive validity: the officers' entry into the home of James Wah Toy and their arrest of Wong Sun. Each of those events was premised on a claim made by a civilian witness that the target possessed narcotics. Those assertions were both deemed insufficiently reliable, because the civilians in question "had never before given information" to the police. 371 U.S. at 480, 491; Wong Sun v. United States, 288 F.2d 366, 370 (9th Cir. 1961). This reasoning is in tension with the approach to assessing civilian witnesses set forth in this Article. *See supra* Section II.A. It resonates, however, with the *Aguilar-Spinelli* framework that the Court would embrace within a year of deciding *Wong Sun* and would overrule two decades later. *See supra* note 207 and accompanying text.

Beck v. Ohio, 379 U.S. 89 (1964) (Stewart, J.)	n/a ⁴⁰¹	Informant	Traditonal PC	Gambling	Invalid
Aguilar v. Texas, 378 U.S. 108 (1964) (Goldberg, J.)	PU Fact	Informant	Traditonal PC	Narcotics	Invalid
Rugendorf v. United States, 376 U.S. 528 (1964) (Clark, J.)	PU Fact	Informant	Traditonal PC	Theft	Valid
United States v. Ventresca, 380 U.S. 102 (1965) (Goldberg, J.)	Narrative Mosaic	Officer	Traditonal PC	Liquor	Valid
Jaben v. United States, 381 U.S. 214 (1965) (Harlan, J.) ⁴⁰²	PU Fact	Officer	Traditonal PC	Tax Evasion	Valid
Schmerber v. California, 384 U.S. 757 (1966) (Brennan, J.)	Narrative Mosaic	Officer	PC Plus (heightened intrusion) ⁴⁰³	DUI	Valid
McCray v. Illinois, 386 U.S. 300 (1967) (Stewart, J.)	PU Fact	Informant	Traditonal PC	Narcotics	Valid
Warden v. Hayden, 387 U.S. 294 (1967) (Brennan, J.)	PU Fact	Civillian	Traditonal PC	Robbery	Valid

^{401.} As the Court noted, the arrest at issue in this case proceeded without any identifiable evidentiary claim at all—and was thus held invalid. *See* 379 U.S. at 93-94 ("The record is meager, consisting only of the testimony of one of the arresting officers . . . that [he] knew the [target] had a [prior criminal] record Beyond that, the officer testified only that he had 'information' [and] had 'heard reports' There is nowhere in the record any indication of what 'information' or 'reports' the officer had received, or, beyond what has been set out above, from what source the 'information' and 'reports' had come.").

⁴⁰². This case technically considers whether there was probable cause to support a criminal complaint issued pursuant to Federal Rule of Criminal Procedure 4. 381 U.S. at 220-21.

^{403.} The facts of this case also involve drunk driving, 384 U.S. at 758, which at least some Justices have suggested ought to cut in favor of a downward adjustment to the Axis Three standard. *See supra* notes 272-276 and accompanying text.

Dyke v. Taylor Implement Mfg. Co., 391 U.S. 216 (1968) (White, J.)	Thin Script ⁴⁰⁴	Officer / Civillian	Traditonal PC	Contempt	Invalid
Terry v. Ohio, 392 U.S. 1 (1968) (Warren, C.J.)	Narrative Mosaic	Officer	PC Minus (minor intrusion)	Robbery / Weapons	Valid
Sibron v. New York, 392 U.S. 40 (1968) (Warren, C.J.)	Thin Script	Officer	PC Minus (minor intrusion)	Narcotics	Invalid
Peters v. New York, 392 U.S. 40 (1968) (Warren, C.J.)	Narrative Mosaic	Officer ⁴⁰⁵	PC Minus (minor intrusion) ⁴⁰⁶	Burglary	Valid
Spinelli v. United States, 393 U.S. 410 (1969) (Harlan, J.)	Narrative Mosaic / PU Fact	Officer / Informant	Traditonal PC	Gambling	Invalid
Chambers v. Maroney, 399 U.S. 42 (1970) (White, J.)	Thin Script	Civilian	Traditonal PC	Armed Robbery	Valid
United States v. Van Leeuwen, 397 U.S. 249 (1970) (Douglas, J.)	Narrative Mosaic	Officer	PC Minus (minor intrusion)	Smuggling	Valid

^{404.} *See* 391 U.S. at 222 ("[The officer] knew only that the car he chased was 'an old make model car,' that it speeded up when he chased it, and that it contained a fresh bullet hole.").

^{405.} The officer in this case was off duty at the time of the relevant events.

^{406.} The Court expressly declined to apply the reasonable suspicion standard in this case, notwith-standing the fact that the intrusion was minor and thus warranted a lower standard of proof—as the Court held in the companion case of *Terry v. Ohio*, 392 U.S. 1 (1968), issued the same day that *Peters* was decided. *Compare Peters v. New York*, 392 U.S. 40, 66 (1968) (holding that there was "probable cause to arrest [Peters] for attempted burglary"), *with id.* at 74 (Harlan, J., concurring in the result) ("I do not think that [the officer] had anything close to probable cause Indeed, if probable cause existed here, I find it difficult to see why a different rationale was necessary to support the stop and frisk in *Terry* ").

Whiteley v. Warden, 401 U.S. 560 (1971) (Harlan, J.)	n/a ⁴⁰⁷	Officer ⁴⁰⁸	Traditonal PC	Burglary	Invalid
Hill v. California, 401 U.S. 797 (1971) (White, J.)	PU Fact	Civilian ⁴⁰⁹	Traditonal PC	Robbery / Weapons	Valid
United States v. Harris, 403 U.S. 573 (1971) (Burger, C.J.) (plurality)	PU Fact	Informant 410	Traditonal PC	Liquor	Valid
Adams v. Williams, 407 U.S. 143 (1972) (Rehnquist, J.)	PU Fact	Informant	PC Minus (minor intrusion)	Narcotics / Weapon	Valid
Almeida-Sanchez v. United States, 413 U.S. 266 (1973) (Stewart, J.)	n/a ⁴¹¹	Officer	Traditional PC	Immigra- tion	Invalid

- **407.** In this case, an officer asserted in an arrest warrant affidavit that the targeted individuals had committed a burglary. *See* **401** U.S. at 563-64. Facially, this would appear to be an assertion of a primary and ultimate fact. But as the Court correctly noted in the course of holding the search invalid, the affidavit "consist[ed] of nothing more than the complainant's conclusion that the individuals named therein perpetrated the offense described." *Id.* at 565. The claim was thus not an assertion of a primary and ultimate fact but rather a conclusory assertion that there was probable cause. *See supra* note 391.
- **408.** "The actual basis for Sheriff Ogburn's conclusion was an informer's tip, but that fact, as well as every other operative fact, is omitted from the complaint." 401 U.S. at 565.
- **409**. The civilian in this case was a police informant whose identity was disclosed during the proceedings. 401 U.S. at 798-800.
- 410. In addition to the primary and ultimate fact asserted by a confidential informant, the affidavit in support of the arrest in this case stated that the target "had a reputation with [the investigating officer] for over 4 years as being a trafficker of nontaxpaid distilled spirits." 403 U.S. at 575.
- 411. "It is undenied that . . . there was no probable cause of *any* kind for the stop or the subsequent search [in this case,] not even the 'reasonable suspicion' found sufficient for a street detention" 413 U.S. at 268 (emphasis added). Rather, the government sought to justify the search as falling within the suspicionless pole for border searches. The Court rejected this argument, however, because the search in question occurred "at least 20 miles north of the Mexican border" and was thus "of a wholly different sort." *Id.* at 273.

United States v. Robinson, 414 U.S. 218 (1973) (Rehnquist, J.)	n/a	Officer	Suspicionless Pole (incident to arrest)	n/a	Valid ⁴¹²
United States v. Ortiz, 422 U.S. 891 (1975) (Powell, J.)	Thin Script	Officer	Traditional PC ⁴¹³	Immigration	Invalid ⁴¹⁴
United States v. Brignoni-Ponce, 422 U.S. 873 (1975) (Powell, J.)	Thin Script	Officer	PC Minus (minor intrusion and immigration)	Immigration	Invalid
United States v. Martinez-Fuerte, 428 U.S. 543 (1976) (Powell, J.) ⁴¹⁵	Thin Script	n/a ⁴¹⁶	PC Minus (minor intrusion and immigration)	Immigration	Valid

- 412. The defendant in this case conceded that the predicate arrest (giving rise to the suspicionless search incident to arrest) was supported by probable cause. 414 U.S. at 220-23. The only relevant question for coding here is thus that of the search incident to that arrest.
- 413. "The only question for decision [in this case] is whether vehicle searches at traffic checkpoints" located "66 road miles north of the Mexican border" "must be based on probable cause," as opposed to some lower standard. 422 U.S. at 892-93. Notably, the Court held that traditional probable cause is indeed required, notwithstanding the immigration interests implicated by the case, because a full-blown "search, even of an automobile, is a substantial invasion of privacy." *Id.* at 896.
- 414. The Court's primary objection to the programmatic search in this case concerned the manner in which the search was conducted: officers could pick and choose whom to search. See 422 U.S. at 896 ("This degree of discretion to search private automobiles is not consistent with the Fourth Amendment.").
- 415. This case involved a programmatic search. The Court's reasoning in such cases often focuses on whether the officers had or needed so-called "individualized suspicion." The cases, however, present thin-script evidentiary claims that apply to large numbers of people—and that can thus be assimilated into the Axis One and Axis Three of the framework offered in this Article. *See supra* notes 69-83 and accompanying text.
- **416.** This case involved a challenge to the Border Patrol's decision to implement a programmatic search. There is thus no traditional claim proponent; rather, the government itself advanced the statistics supporting the claim. *See* 428 U.S. at 554 ("Approximately 10 million cars pass the checkpoint location each year In calendar year 1973, approximately 17,000 illegal aliens were apprehended there.").

Delaware v. Prouse, 440 U.S. 648 (1979) (White, J.)	n/a ⁴¹⁷	Officer	PC Minus (minor intrusion & public travel)	n/a	Invalid
Dunaway v. New York, 442 U.S. 200 (1979) (Brennan, J.)	PU Fact	Civilian ⁴¹⁸	Traditonal PC	Homicide / Robbery	Invalid ⁴¹⁹
Arkansas v. Sanders, 442 U.S. 753 (1979) (Powell, J.)	PU Fact	Informant	Traditonal PC	Narcotics	Valid ⁴²⁰
Brown v. Texas, 443 U.S. 47 (1979) (Burger, C.J.)	Thin Script	Officer	PC Minus (minor intrusion)	Narcotics	Invalid
Ybarra v. Illinois, 444 U.S. 85 (1979) (Stewart, J.)	Thin Script	Officer	PC Minus (minor intrusion)	Narcotics	Invalid

^{417.} The claim proponent in this case did not proffer any facts other than that the stop was "routine": "[T]he patrolman explained, 'I saw the car in the area and wasn't answering any complaints, so I decided to pull them off." 440 U.S. at 650-51.

^{418.} In this case, an incarcerated individual named James Cole told a police officer "that he had [in turn] been told . . . by another inmate, Hubert Adams[,] . . . that [Adams'] younger brother, Ba Ba Adams, had told [Adams] that [Ba Ba] and a fellow named 'Irving' [the target of the arrest] had been involved in the crime." 442 U.S. at 203, n.1. Because none of these individuals' identities were concealed, they are not coded as informants. Under these circumstances, however, the generally applicable presumption of credibility for civilian witnesses could likely be rebutted. *Cf. supra* note 218 and accompanying text. And indeed, the prosecution in this case ultimately conceded that the tip was insufficient to support a finding of traditional probable cause. 442 U.S. at 207 & n.7.

^{419.} The prosecution conceded that the police lacked traditional probable cause. 442 U.S. at 207 & n.7.

^{420.} The Court held that the probable-cause requirement was satisfied but deemed the search unconstitutional because the police did not have a warrant. 442 U.S. at 763.

United States v. Mendenhall, 446 U.S. 544 (1980) (Powell, J.) (plurality) ⁴²¹	Mixed Claim ⁴²²	Officer	PC Minus (minor intrusion and public travel)	Narcotics	Valid ⁴²³
Rawlings v. Kentucky, 448 U.S. 98 (1980) (Rehnquist, J.)	PU Fact ⁴²⁴	Officer	Traditional PC	Narcotics	Valid
Reid v. Georgia, 448 U.S. 438 (1980) (per curiam)	Mixed Claim ⁴²⁵	Officer	Traditonal PC	Narcotics	Invalid
United States v. Cortez, 449 U.S. 411 (1981) (Burger, C.J.)	Narrative Mosaic	Officer	PC Minus (minor intrusion)	Immigration	Valid

- 421. This case involved two potential Fourth Amendment events: the target individual was approached by officers and asked a brief series of questions in a public area of an airport; she was then brought to a separate room and searched. A majority of the Court concluded that the latter event was consensual. 446 U.S. at 557-59. And Justice Stewart (who announced the judgment) deemed the initial encounter noncoercive and thus not a seizure. *Id.* at 552-55 (plurality opinion). A separate plurality, however, opted to "assume for present purposes that the [initial] stop did constitute a seizure," and proceeded to assess its validity. *Id.* at 560 (Powell, J., concurring in part and concurring in the judgment).
- 422. "The agent testified that the respondent's behavior fit the so-called 'drug courier profile'—an informally compiled abstract of characteristics thought typical of persons carrying illicit drugs." *Id.* at 547 n.1. *But see supra* Section I.C.2 (noting defects in this profile that render it a "faux thin script"). The agents also testified, however, that when they approached the target, she produced an airline ticket bearing a different name than the one on her license and "became quite shaken, extremely nervous[, and] had a hard time speaking." *Mendenhall*, 446 U.S. at 548.
- 423. The prosecution conceded a lack of traditional probable cause in this case. *Id.* at 550-51.
- 424. This is the rare case in which the target of the seizure confessed to the officer before being arrested. See 448 U.S. at 111 ("Once petitioner admitted ownership of the sizable quantity of drugs found in [someone else's] purse, the police clearly had probable cause to place [him] under arrest.").
- 425. The target "appeared to the agent to fit the so-called 'drug courier profile," defined in this case to comprise four discrete characteristics. 448 U.S. at 440-41. *But see supra* Section I.C.2 (noting defects in this profile that render it a "faux thin script"). However, the arresting agents also observed additional and more idiosyncratic facts. *See id.* at 439 (describing interaction between the target and another man, and noting that "the men appeared nervous during the [subsequent] encounter" with the officer). The target also eventually dropped his bag and ran from the officer, though it is unclear on the Court's reasoning whether this happened before or after a seizure had commenced. *Id.* at 442 (Powell, J., concurring).

Michigan v. Summers, 452 U.S. 692 (1981) (Stevens, J.)	n/a	Officer	Suspicionless Pole (incident to arrest)	Narcotics	Valid
United States v. Ross, 456 U.S. 798 (1982) (Stevens, J.)	PU Fact	Informant	Traditonal PC	Narcotics	Valid
Florida v. Royer, 460 U.S. 491 (1983) (White, J.) (plurality) ⁴²⁶	Mixed Claim ⁴²⁷	Officer	PC Minus (minor intrusion and public travel) / Traditional PC ⁴²⁸	Narcotics	Valid / Invalid ⁴²⁹
Texas v. Brown, 460 U.S. 730 (1983) (Rehnquist, J.) (plurality) ⁴³⁰	Narrative Mosaic	Officer	Traditional PC	Narcotics	Valid
Illinois v. Gates, 462 U.S. 213 (1983) (Rehnquist, J.)	PU Fact / Narrative Mosaic	Anonym / Officer	Traditonal PC	Narcotics	Valid

- **426.** This case involved two separate Fourth Amendment events: the target individual was approached by officers and asked a series of questions in a public area of an airport; he was then brought to a separate room and searched. The Court deemed the initial encounter a stop and held it to be justified by reasonable suspicion. **460** U.S. at 501-02. However, the Court deemed the second encounter a full-blown arrest, and held that it was not supported by traditional probable cause. *Id.* at 502-07. Thus, the initial seizure was valid, but the subsequent one was not.
- 427. Much like in *United States v. Mendenhall*, 446 U.S. 544 (1980), and *Reid v. Georgia*, 448 U.S. 438 (1980) (per curiam), this case turned on a combination of "the so-called 'drug courier profile,'" *Royer*, 460 U.S. at 493, and a smattering of other case-specific facts. *See supra* notes 422 & 425.
- **428**. See supra note 426.
- **429**. *Id*.
- **430.** This case concerns an arrest and seizure of evidence that occurred in the course of a "a routine driver's license checkpoint." **460** U.S. at 730. That programmatic search, however, was not at issue in the case.

United States v. Villamonte-Marquez, 462 U.S. 579 (1983) (Rehnquist, J.)	n/a	Officer	Suspicionless Pole (border)	n/a	Valid
Massachusetts v. Upton, 466 U.S. 727 (1984) (per curiam)	PU Fact	Civilian ⁴³¹	Traditonal PC	Theft / Burglary	Valid
United States v. Leon, 468 U.S. 897 (1984) (White, J.)	PU Fact / Narrative Mosaic ⁴³²	Informant / Officer ⁴³³	Traditonal PC	Narcotics	Invalid ⁴³⁴
Florida v. Rodriguez, 469 U.S. 1 (1984) (per curiam)	Narrative Mosaic	Officer	PC Minus (minor intrusion and public travel)	Narcotics	Valid
United States v. Hensley, 469 U.S. 221 (1985) (O'Connor, J.)	PU Fact	Informant	PC Minus (minor intrusion)	Robbery	Valid
New Jersey v. T.L.O., 469 U.S. 325 (1985) (White, J.)	Narrative Mosaic	Civilian ⁴³⁵	PC Minus (schools)	Narcotics	Valid

- via telephone but was identified during the course of the call. 466 U.S. at 729. Her motivations for seeking anonymity may have been benign, *see id.* at 734 (noting the witness's "fear of . . . retaliation"), although she also evinced bias toward the target of the search, *see id.* (noting "her recent breakup with [the target] and her desire 'to burn him'").
- **432.** This case involved two separate searches. The first was supported by an assertion of a primary and ultimate fact: "an informant had told a Glendale police officer that Leon stored a large quantity of methaqualone at his residence in Glendale." 468 U.S. at 902. But the police also searched a separate residence based on an investigation they conducted that yielded a rather involved narrative mosaic. *Id.* at 901-04.
- **433**. See supra note 432.
- **434.** The prosecution conceded the lack of probable cause. *Id.* at 905. The fruits, however, were admitted under the good-faith exception to the exclusionary rule (which was established in this case).
- **435.** The civilian in question here was a schoolteacher, and thus a state official. 469 U.S. at 328. The credibility issues described *supra* Section II.B, however, apply only to more traditionally investigative state actors.

United States v. Sharpe, 470 U.S. 675 (1985) (Burger, C.J.)	Mixed Claim ⁴³⁶	Officer	PC Minus (minor intrusion)	Narcotics	Valid
United States v. Montoya de Hernandez, 473 U.S. 531 (1985) (Rehnquist, J.)	Narrative Mosaic	Officer	PC Minus (extended border search) ⁴³⁷	Narcotics	Valid
New York v. P.J. Video, Inc., 475 U.S. 868 (1986) (Rehnquist, J.)	PU Fact	Officer	Traditonal PC ⁴³⁸	Obscenity	Valid
Arizona v. Hicks, 480 U.S. 321 (1987) (Scalia, J.)	Narrative Mosaic	Officer	Traditonal PC ⁴³⁹	Theft	Invalid ⁴⁴⁰

- 436. The stop in this case was premised in part on a thin-script profile. See 470 U.S. at 677 (noting that the stopped vehicle was a "pickup truck with an attached camper shell" traveling through "an area under surveillance for suspected drug trafficking"); id. at 710, n.9 (Brennan, J., dissenting) ("[T]hese detentions were a little more than 'profile stops' similar to numerous stops of campers and recreational vehicles carried out by the DEA in the general area on the day in question." (quoting the trial court opinion below)). However, when officers attempted to pull the vehicle over, a further factual narrative unfolded: the truck "cut between" another car and the patrol car, "nearly hitting the patrol car[] and continued down the highway"; it was then subsequently observed to be so heavily loaded that its shock absorbers could "not sink any lower." Id. at 678-79 (noting, in addition, that officers smelled marijuana emanating from the vehicle's covered rear window).
- 437. This case involved a search at the functional equivalent of the border, where suspicionless searches are ordinarily justified. See Almeida-Sanchez v. United States, 413 U.S. 266, 272-73 (1973). But the search here went "beyond the scope of a routine customs search and inspection," which prompted the Court to apply the reasonable suspicion standard (i.e., probable cause minus). Id. at 541-43.
- 438. The Court here applied the traditional probable-cause standard notwithstanding the fact that the items targeted for seizure implicated potential First Amendment concerns. See 475 U.S. at 874 ("[W]e have never held or said that ... a 'higher' standard is required by the First Amendment.").
- 439. Justice O'Connor, in dissent, would have upheld the search in this case "on the ground that it was a 'cursory inspection' rather than a 'full-blown search,' and could therefore be justified by reasonable suspicion instead of probable cause." Id. at 328 (majority opinion). The majority rejected that approach. Id. at 329.
- 440. The government conceded that the traditional probable-cause standard was not met. Id. at 326.

Griffin v. Wisconsin, 483 U.S. 868 (1987) (Scalia, J.)	PU Fact	Officer	PC Minus (probationer)	Weapons	Valid
Skinner v. Ry. Labor Execs.' Ass'n, 489 U.S. 602 (1989) (Kennedy, J.) ⁴⁴¹	Thin Script	n/a ⁴⁴²	PC Minus (public travel)	DUI	Valid
Nat'l Treasury Emps. Union v. Von Raab, 489 U.S. 656 (1989) (Kennedy, J.) ⁴⁴³	Thin Script	n/a ⁴⁴⁴	PC Minus (customs) ⁴⁴⁵	Narcotics	Valid

- 441. This case involved a programmatic search. See supra note 415.
- 442. This case was a civil suit challenging a regulation that purported to authorize a programmatic search. There was thus no traditional claim proponent; rather, the government itself advanced the statistics supporting the claim. See 489 U.S. at 607 n.1 ("The [Federal Railroad Administration relied on] a 1979 study examining the scope of alcohol abuse on seven major railroads [which] found that '[a]n estimated one out of every eight railroad workers drank at least once while on duty during the study year [and that] 5% of workers reported to work "very drunk" or got "very drunk" on duty at least once in the study year ").
- 443. This case involved a programmatic search. See supra note 415.
- **444.** This case was a civil suit challenging a regulation that purported to authorize a programmatic search. There was thus no traditional claim proponent.
- 445. In most programmatic search cases, the Court relies on empirical evidence showing that the class of people targeted for the search had some identifiable (and sufficient) probability of including lawbreakers. See supra notes 81 & 442; infra notes 448, 450 & 453. As the Court would later observe, however, no such evidence was put forward in Von Raab. See Chandler v. Miller, 520 U.S. 305, 320 (1997) (noting that "Von Raab... sustained a drug-testing program for Customs Service officers prior to promotion or transfer to certain high-risk positions, despite the absence of any documented drug abuse problem among Service employees"). Rather, the Von Rabb Court upheld the programmatic drug-testing search of Customs agents because "it was developed for an agency with an 'almost unique mission' as the 'first line of defense' against the smuggling of illicit drugs into the United States." Id. at 316 (quoting Von Raab, 489 U.S. at 660, 674, 668). One might thus reasonably code Von Raab as a "suspicionless pole" case. Cf. supra Section III.C. Alternatively, one might code it as a case in which the "PC Minus" threshold is exceptionally low, cf. supra note 361 and accompanying text, and in which the Court implicitly deemed the evidence sufficient to meet that standard, cf. supra note 92 and accompanying text.

United States v. Sokolow, 490 U.S. 1 (1989) (Rehnquist, C.J.)	Mixed Claim ⁴⁴⁶	Officer	PC Minus (minor intrusion and public travel)	Narcotics	Valid
Alabama v. White, 496 U.S. 325 (1990) (White, J.)	PU Fact	Anonym	PC Minus (minor intrusion)	Narcotics	Valid
Mich. Dep't of State Police v. Sitz, 496 U.S. 444 (1990) (Rehnquist, C.J.) ⁴⁴⁷	Thin Script	n/a ⁴⁴⁸	PC Minus (minor intrusion and public travel)	DUI	Valid
Vernonia Sch. Dist. 47J v. Acton, 515 U.S. 646 (1995) (Scalia, J.) ⁴⁴⁹	Thin Script	n/a ⁴⁵⁰	PC Minus (schools)	Narcotics	Valid

- 446. Much like in *United States v. Mendenhall*, 446 U.S. 544 (1980), *Reid v. Georgia*, 448 U.S. 438 (1980) (per curiam), and *Florida v. Royer*, 460 U.S. 491 (1983), this case turned on a combination of the so-called "drug courier profile" and a smattering of other case-specific facts. *See supra* notes 422, 425 & 427. Notably, the Court of Appeals here explicitly analyzed the case as a mixed claim: it "divided the facts bearing on reasonable suspicion into two categories," one for the case-specific features of the claim and another for "characteristics[] shared by drug couriers" more generally. *Sokolow*, 490 U.S. at 6 (noting that, for the latter category, the Court of Appeals required "'[e]mpirical documentation' that the combination of facts at issue did not describe the behavior of 'significant numbers of innocent persons'"). The Supreme Court rejected this reasoning. Interestingly, however, the Court's own rhetoric suggests the possibility that the case may actually be a good example of a "thick script." *Compare id.* at 4 ("This case involves a typical attempt to smuggle drugs through one of the Nation's airports."), *and id.* at 3 (disaggregating the government's claim into six discrete facts), *with supra* Section I.C.3 (describing thick scripts).
- 447. This case involved a programmatic search. See supra note 415.
- 448. This case was a civil suit challenging a police department's decision to implement a programmatic search. There was thus no traditional claim proponent; rather, the government itself advanced the statistics supporting the claim. See 496 U.S. at 455 (noting evidence submitted by the government, based on direct experience and expert testimony, that "approximately 1.6 percent of the drivers passing through the checkpoint were arrested for alcohol impairment").
- 449. This case involved a programmatic search. See supra note 415.
- **450.** This case was a civil suit challenging a school's decision to implement a programmatic search. There was thus no traditional claim proponent; rather, the government itself advanced the statistics supporting the claim. *See* 515 U.S. at 648-49 (noting that "teachers and administrators observed a sharp increase in drug use" and that "the number of disciplinary referrals . . . rose to more than twice the number reported" a few years earlier).

Chandler v. Miller, 520 U.S. 305 (1997) (Ginsburg, J.) ⁴⁵¹	Thin Script	n/a ⁴⁵²	Traditional PC	Narcotics	Invalid ⁴⁵³
Illinois v. Wardlow, 528 U.S. 119 (2000) (Rehnquist, C.J.)	Thin Script	Officer	PC Minus (minor intrusion)	Narcotics / Weapon	Valid
Florida v. J.L., 529 U.S. 266 (2000) (Ginsburg, J.)	Thin Script	Anonym	PC Minus (minor intrusion)	Weapons	Invalid
Indianapolis v. Edmond, 531 U.S. 32 (2000) (O'Connor, J.) ⁴⁵⁴	Thin Script	n/a ⁴⁵⁵	Traditional PC	Narcotics	Invalid
Illinois v. McArthur, 531 U.S. 326 (2001) (Breyer, J.)	PU Fact	Civilian	Traditonal PC	Narcotics	Valid
United States v. Knights, 534 U.S. 112 (2001) (Rehnquist, C.J.)	Narrative Mosaic	Officer	PC Minus (probationer)	Arson / Weapon	Valid
United States v. Arvizu, 534 U.S. 266 (2002) (Rehnquist, C.J.)	Narrative Mosaic	Officer	PC Minus (minor intrusion and immigration)	Immigration	Valid

^{451.} This case involved a programmatic search. See supra note 415.

^{452.} This case was a civil suit challenging a school's decision to implement a programmatic search. There was thus no traditional claim proponent.

^{453.} In this case, the thin-script profile targeted "candidates for designated state office," with the implicit probabilistic claim that such individuals abuse drugs at rates sufficient to warrant drug-testing as a condition of seeking office. 520 U.S. at 308. There was, however, an "absence of any [actual] record of drug abuse by elected officials in Georgia." 520 U.S at 311. *Cf. id.* at 319 (holding that "[p]roof of unlawful drug use may help to clarify—and to substantiate—the precise hazards posed by such use" and would "shore up [a] . . . general search program").

^{454.} This case involved a programmatic search. See supra note 415.

^{455.} This case was a civil suit challenging a police department's decision to implement a programmatic search. There was thus no traditional claim proponent; rather, the government itself advanced the statistics supporting the claim. *See* 531 U.S. at 35 ("The overall 'hit rate' of the program was . . . approximately nine percent.").

Maryland v. Pringle, 540 U.S. 366 (2003) (Rehnquist, C.J.)	Thin Script	Officer	Traditonal PC	Narcotics	Valid
United States v. Grubbs, 547 U.S. 90 (2006) (Scalia, J.)	PU Fact ⁴⁵⁶	Officer	Traditional PC	Child Porno- graphy	Valid
Safford Unified Sch. Dist. No. 1 v. Redding, 557 U.S. 364 (2009) (Souter, J.)	Narrative Mosaic	Civilian	Traditional PC ⁴⁵⁷	Narcotics	Invalid
Florence v. Bd. of Freeholders, 566 U.S. 318 (2012) (Kennedy, J.)	n/a	Officer	Suspicionless Pole (incident to arrest)	n/a	Valid

- 456. In this case, officers arranged a sting operation in which child pornography was (at their direction) mailed to the target; they then applied in advance for an anticipatory warrant that would become operative only once they saw that the contraband had been delivered. 547 U.S. at 92-93. In this posture, there are technically two separate probable-cause questions: "It must be true not only that *if* the triggering condition occurs 'there is a fair probability that contraband or evidence of a crime will be found in a particular place,' but also that there is probable cause to believe the triggering condition *will* occur." *Id.* at 96-97 (quoting Illinois v. Gates, 462 U.S. 213, 238 (1983)). In the context of such a case, where the officers confirm that the item in question is contraband and personally mail it to the target, the evidentiary claim supporting both questions is a primary and ultimate fact (albeit a contingent one until the moment when the package is claimed by the target).
- 457. This case technically involved two searches, both of which were conducted in a school, where the "standard of reasonable suspicion [is generally used] to determine the legality of a school administrator's search of a student." 557 U.S. at 370. The first search was of the targeted student's "backpack and outer clothing," and the Court deemed it justified by reasonable suspicion. Id. at 373-74. The second search, however, was the central focus of the opinion. That search was highly invasive. See id. at 374 ("[S]trip search is a fair way to speak of it."). The Court accordingly held that the search could only be justified by a standard higher than ordinary reasonable suspicion, and concluded that on the facts of the case at hand "the content of the suspicion failed to match the degree of intrusion." Id. at 375. The Court, however, did not expressly label this higher standard "probable cause." One could thus conceivably read the opinion as having evaluated even this second, more intrusive search under a "pc minus" standard. Indeed, the Court at times suggests that the search of the student's underwear would not have been justified under the reasonable suspicion threshold, in which case it would have been unnecessary to decide whether a higher standard in fact applied. See id. at 376-77 ("[W]hat was missing from the suspected facts . . . was . . . any reason to suppose that Savana was carrying pills in her underwear." (emphasis added)).

Florida v. Harris, 568 U.S. 237 (2013) (Kagan, J.)	Thin Script ⁴⁵⁸	Officer	Traditonal PC	Narcotics	Valid
Maryland v. King, 569 U.S. 435 (2013) (Kennedy, J.)	n/a	Officer	Suspicionless Pole (incident to arrest)	n/a	Valid
Navarette v. California, 572 U.S. 393 (2014) (Thomas, J.)	Thin Script	Anonym	PC Minus (minor intrusion and public travel)	DUI	Valid
District of Columbia v. Wesby, 138 S. Ct. 577 (2018) (Thomas, J.)	Narrative Mosaic	Civilian / Officer	Traditonal PC	Trespass	Valid
Nieves v. Bartlett, 139 S. Ct. 1715 (2018) (Roberts, C.J.)	PU Fact	Officer	Traditional PC	Disorderly Conduct	Valid

^{458.} As discussed in detail *supra* notes 98-109 and accompanying text, the driving fact in this case, and the central focus of the Court's analysis, is an alert from a drug-sniffing dog. 568 U.S. at 244-48. It bears noting, however, that the officer also "saw that [the driver] was 'visibly nervous,' unable to sit still, shaking, and breathing rapidly," facts that—combined with the canine alert—could render the case a "mixed claim." *Cf. supra* note 169 and accompanying text. And yet, after briefly noting these additional facts when describing the history of the case, the *Harris* Court never mentions them again, devoting its entire analysis instead to the reliability of the canine alert. That focus suggests that the Court deemed the alert "the load-bearing and . . . dispositive aspect of the claim," and reasonably so. *Supra* text accompanying note 171. Accordingly, the case is coded here as a thin script. *See supra* note 379.