Police Are People Too: Cognitive Obstacles to, and Opportunities for, Police Getting the Individualized Suspicion Judgment Right

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I. INTRODUCTION

A. Streetlights and Shadows

This article addresses the cognitive obstacles to, and opportunities for, police getting the individualized suspicion judgment right. This article makes a simple assumption: people suffer and benefit from certain common ways of thinking, and police are people too. Granted, police have the benefit of certain experience, training, and resulting intuitions about how to do their jobs that laypersons lack. But that is true of people in most employment-related roles, and even people with expertise in a subject-matter area, that is, people with trained intuition, make common mistakes. Gary Klein, a senior scientist at Applied Research Associates, begins his book on practical decision making with the following story that illuminates the nature of all expert decision making:

A policeman saw a drunk searching for something under a streetlight. “What have you lost, my friend?” the policeman asked. “My keys," said the drunk. The policeman then helped the drunk look and finally asked him: “Where exactly did you drop them?” “Over there,” responded the drunk, pointing toward a dark alley. The policeman then

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1 For a concise but detailed explanation of the “individualized suspicion” judgment’s meaning, see Peter J. Henning et al., Mastering Criminal Procedure 59–61 (2010).

2 For a general guide on the nature of human reasoning, including its flaws, see generally Michael Kaplan & Ellen Kaplan, Bozo Sapiens: Why to Err Is Human (2009).

3 See infra text accompanying note 208.

4 See infra text accompanying notes 223–34.
asked: "Why are you looking here?" The drunk immediately replied: "Because the light is so much brighter here."  

For Klein, this story is a metaphor for human decision making. The light—revealing color and great detail—shines on those aspects of a problem that are clear. We see the light through one visual structure: the cones in our eyes. We address those clearly illuminated aspects of a problem, says Klein, with an associated way of thinking, namely, conscious, rational, systematic thought.

But the cones are useless in darkness, which represents, in the story, ambiguity—something that humans dread. We need a different visual structure, namely rods, to see in the dark, and the cognitive structure in Klein's tale that is associated with the rods is our subconscious mind.

Yet real problems have aspects of clarity and ambiguity about them. Solutions therefore lie at the intersection of streetlights and shadows, of the conscious and subconscious minds.

The topic of this article is a subset, a corner, of the intersection of streetlights and shadows. But on this corner, the roles of drunk and policeman are reversed. My interest is in exploring what, at least partly, subconscious habits of thinking stand in the way of, or help to promote, police accuracy in making searches and decisions. More specifically, I want to examine what psychological forces may

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5 GARY KLEIN, STREETLIGHTS AND SHADOWS: SEARCHING FOR THE KEYS TO ADAPTIVE DECISION MAKING xiii (2009).
6 See id. at 5.
8 See KLEIN, supra note 5, at 6.
9 See id.
10 See id. at 93; CASSEL ET AL., supra note 7, at 193 (explaining the role of rods in the biology of sight). Seeing in the dark, as Klein also notes, requires viewing objects at an angle, rather than head-on, as the latter perspective would focus light on the near-useless-in-the-dark, cone-rich, central retina. See KLEIN, supra note 5, at 6.
11 See KLEIN, supra note 5, at 60–61.
12 See id. at 80–82. It is an oversimplification of modern cognitive science to speak of the conscious and subconscious minds as a dichotomy. Rather, humans have a range of mental states lying on a continuum ranging from less to more conscious. See generally Andrew E. Taslitz, FORGETTING FREUD: THE COURTS' FEAR OF THE SUBCONSCIOUS IN DATE RAPE (AND OTHER) CASES, 16 B.U. PUB. INT. L.J. 145, 169–78 (2007) (explaining all these points). Moreover, the varying degrees of consciousness and unconsciousness interact with one another. See id. Furthermore, most conscious thought has its origins in the subconscious. See id. at 171. Additionally, some of the less-conscious portions of the mind can be made accessible to consciousness, and conscious action can often work to change those portions of the unconscious mind not readily accessible to the conscious. See id. at 176, 178. Nevertheless, the conscious/unconscious distinction is a useful simplifying idea, the unconscious being largely governed by rapid, categorical reasoning, the conscious mind being slower, but often capable of more flexible reasoning. See id. at 169–78. In some contexts, the more realistic spectrum description of the mind would be essential. But for my purposes here, that description would simply add unnecessary and obfuscating ambiguity.
lead police to err in deciding that there is reasonable suspicion to stop or frisk, or probable cause to search or arrest. But I also want to consider what psychological forces may help to improve police choices in this area. Understanding these forces should enable us to encourage more improvement than decay.

At the heart of both reasonable suspicion and probable cause is their shared commitment to particularized judgments—to judging the individual’s likely guilt or innocence based primarily upon his own actions, beliefs, and character. Stereotype, surmise, or even informed guess should play no role in this judgment. Mistakes in making this particularized judgment are thus at the heart of my paper as well.

B. Fourth Amendment Error

“Error” can occur in at least two ways: first, by catching the guilty by pure luck rather than by the reasoned, individualized decision-making process that the Constitution commands; and, second, by searching or seizing individuals who are innocent of any crime, or at least who are not in possession of any evidence of crime, at the time of a search. In theory, the former error is harder to measure than is the latter, though the effort to gauge the impact of either with any specificity is also too rarely made.

Yet neither type of error is improbable, nor are the costs of a mistake insignificant. The Fourth Amendment to the United States Constitution, as interpreted by the United States Supreme Court, at least generally presumes that

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13 See Andrew E. Taslitz, What Is Probable Cause, and Why Should We Care?: The Costs, Benefits, and Meaning of Individualized Suspicion, 73 LAW & CONTEMP. PROBS. (forthcoming 2010) (manuscript at 1-3) (on file with Law and Contemp. Probs.) (defining “individualized suspicion,” defending the concept against critics’ contentions that it describes something that cannot exist, and cataloguing the social benefits and costs of embracing a robust version of the concept in Fourth Amendment reasonable suspicion and probable cause decisions).

14 Cf. BRIAN FORST, ERRORS OF JUSTICE: NATURE, SOURCES, AND REMEDIES 3-4 (2004) (defining “errors of justice” as occurring “either when an innocent person . . . is harassed, detained or sanctioned, or when a culpable offender receives a sanction that is either more or less than optimal—one that minimizes social cost—or escapes sanctioning altogether,” and comparing that sort of error with the more traditional lawyers’ idea of justice errors as “errors in the interpretation, procedure, or execution of the law—typically, errors that violate due process”); Steven Penrod, Eyewitness Identification Evidence: How Well Are Witnesses and Police Performing?, 18 CRIM. JUST. 37, 40-45 (2003) (addressing the cost of relying on mere “lucky guesses” of a suspect’s identity in the area of eyewitness identification).

15 This is because in the most easily measurable event—catching a guilty person—a correct outcome occurs but via a flawed process, with the process harder to measure than the outcome. Furthermore, individuals have a hard time recognizing when good outcomes result from good luck, being more willing to attribute those outcomes to the individuals’ superior performance. See infra text accompanying notes 328-32.

16 At least this effort is too rarely made in the area of search and seizure, in which I know of few serious empirical studies of these sorts of error rates and no theorectico-empirical efforts at synthesis of likely contributors to errors of the sort I conduct here.
traditional criminal searches and seizures made without particularized suspicion do violence to fundamental constitutional values. We must catch the bad guys, but we must do so in the right way: by invading core protections of privacy, property, and free movement only when we have ample justification, rooted in reasonably solid evidence, that a particular person’s wrongdoing has occurred or that evidence of it will be found. Any other presumption undermines values central to selfhood and to the dissent, diversity, and security of personality and of ideas that are essential to a free people. The Fourth Amendment thus seems most overtly concerned with the first type of error: avoiding catching the bad guy by the lucky guess rather than the informed choice.

But the second type of error—the unknowingly often wrong (the unlucky) guess—cannot be ignored either. The Fourth Amendment’s fundamental command is that all searches and seizures be “reasonable.” What is reasonable turns on a weighing of state crime-control interests against individual and community interests. Any concept of reasonable suspicion or probable cause that tolerates massive false negative rates—frequent invasions of privacy, property, and locomotive rights that ensnare the apparently innocent—is a flawed conception. The costs imposed on communities and individuals become great, while little in the way of crime-control efforts is achieved. There is thus too little “bang for the buck” spent on aggressive policing.

For example, in 2006 alone the New York City Police Department [NYPD] made 508,540 stops or stop-and-frisks, a 500% increase over those made during the preceding year. Yet in only 10% of these cases did police make arrests or issue summonses, an apparent error rate of the second type of 90%. (There may be high error rates of the first type too, that is, simply ignoring constitutional processes, but no precise numerical data are available on this point). There also seems to be significant error in the reliance police place on race as an indicator of

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18 See id.
20 U.S. CONST. amend. IV.
21 See TASLITZ ET AL., supra note 17, at 175–76.
22 See Taslitz, supra note 13 (manuscript at 23–26).
24 Krupanski et al., supra note 23, at 1; GREG RIDGEWAY, ANALYSIS OF RACIAL DISPARITIES IN THE NEW YORK POLICE DEPARTMENT’S STOP, QUESTION, AND FRISK PRACTICES 43 (2007).
suspicion. Of those persons stopped by the NYPD in 2006, 45% of Blacks and Latinos were also frisked, compared to only 29% of Whites, “even though [W]hite suspects were 70% more likely than Black suspects to have a weapon.” These statistics reveal the lucky ones, the ones who were apparently released from police custody once error was found, suffering “only” the harm of needless humiliation. But on other occasions, police have relied on a combination of questionable information sources to make arrests and viewed crime through police tunnel vision, resulting in convicting persons who were later shown to be entirely innocent of crime, a result whose probability is again likely magnified where the arrestee is a member of certain minority racial or ethnic groups.

These two types of errors may, of course, also be related—the failure to follow sufficiently robust constitutional procedures not only unjustifiably infringing upon privacy and related rights but also increasing the likelihood of humiliating or, still worse, convicting, the innocent. The analysis to come will indeed suggest that this connection is a plausible one.

It must not be forgotten, however, that it is not only the innocent who suffer from mistakes. Every innocent person stopped, arrested, or even convicted based upon flawed procedures may mean a guilty man roaming free, his wrong unpunished, perhaps to offend again. Repeated police errors can also undermine public trust, leading citizens to avoid reporting crimes, sharing information with law enforcement, or cooperating with police requests. In the long run, all these consequences can increase overall crime and decrease capture rates for the guilty.

Furthermore, even when police are correct in individual cases, if their overall error rate is high, justified prosecutions occur at an unduly high cost in police time and resources. If error rates can be brought down, police may catch more lawbreakers for a given amount of effort—an efficiency to be desired in purely

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25 Krupanski et al., supra note 23, at 2; RIDGEWAY, supra note 24, at xi.
26 See DALE C. CARSON & WES DENHAM, ARREST-PROOF YOURSELF 174 (2007) (“Being questioned by police is insulting. It makes you feel violated and used. It is, however, less insulting than being arrested.”).
28 See id. at 1107–08 (analyzing risks of convicting the innocent); Andrew E. Taslitz, Respect and the Fourth Amendment, 94 J. CRIM. L. & CRIMINOLOGY 15, 94–95 (2003) (analyzing risks of humiliation).
29 See infra text accompanying notes 170–77.
32 See FORST, supra note 14, at 45–56, 66–111 (analyzing criminal justice error costs generally and policing costs specifically); HARRIS, supra note 31, at 73–87 (analyzing data on racial profiling costs).
monetary terms, especially in a time of tight police budgets. In addition, lower error rates are both politically and morally desirable. Lower error rates may therefore promise more, not less, effective crime control.

C. Error Reduction and the Duties to Investigate, Evaluate, and Report

Until now, I have talked about police errors in individualized judgments as subdividing into two further types of errors—unwarranted privacy and related invasions of rights and failure to uncover evidence of crime. But, correspondingly, the individualized judgment mandate may make these two types of errors themselves less likely if the mandate is taken seriously. More investigation is required to be able to point to evidence that this person has done wrong than to show that he fits into a group or a stereotype that is assumed to have done wrong. At a certain point, however, further investigation likely increases the chances of both types of error, but, I will argue here, that saturation point is unlikely to be reached in the typical reasonable suspicion or probable cause decision.

A particularized inquiry requirement thus also boils down to a duty to investigate—a duty recognized in some case law—and to related duties to evaluate the evidence carefully before acting and to articulate clear justifications for action to third parties, such as police superiors, the judiciary, and the general public. Particularized inquiry, properly understood, thus serves goals of accountability and transparency, goals of independent value, which may themselves spur self-corrective mechanisms that further reduce the risk of error.

My position here flies in the face of a growing academic movement that valorizes police hunches and intuitive decision making over articulable bases, sees them as being beyond third parties’ understanding, and therefore counsels increasing deference to police judgment. That movement, I argue, is not so much wrong as it unwisely displays but one portion of a much more complex picture.

33 See Forst, supra note 14, at 71–73, 109–11.
34 See infra text accompanying notes 128–30.
35 See infra text accompanying notes 255–481.
36 See Andrew E. Taslitz, Myself Alone: Individualizing Justice Through Psychological Character Evidence, 52 Md. L. REV. 1, 18–20 (1993) (discussing the value of, and depth of information required by, individualizing or particularizing justice); infra text accompanying notes 482–505 (discussing case law on the duty to investigate and the duty’s roots in the Fourth Amendment’s common particularized inquiry requirement).
37 See Taslitz, supra note 36, at 22–24.
Hunches and intuition have their place. But if they replace rather than complement more conscious, systematic thinking, they leave us in the dark with no hope of finding the light.39

This piece ends with some recommendations for change, but they are broad admonitions and only tentative recommendations because my focus here is primarily on the competency of police, acting as individuals and as an institution, in minimizing error in making the individualized suspicion judgment.40 A fuller account of institutional change would require a comparative institutional analysis exploring the relative competency of the judiciary, the legislature, administrative agencies, non-governmental organizations, and the people as alternative or supplementary institutions contributing to error reduction.41 I do touch briefly on several of these other institutions, but primarily to explore how they do, or may, under current or other institutional arrangements, affect police behavior. I do not pretend to offer here a more comprehensive analysis of any of these institutions in themselves or as they interact with other governing bodies. In other words, a thorough, comparative institutional analysis would have to show that judges, legislators, or other institutions, though flawed, are less flawed than police in making these decisions.42 That task I do not attempt here.

Finally, my emphasis is primarily on the often rapid decisions of police on the beat because they account for the vast bulk of searches, seizures, stops, and arrests in the United States.43 I compare their decisions to the somewhat more leisurely work of detectives seeking warrants and, to a still lesser degree, to federal law enforcement officers.44 My analysis has relevance to all these groups, but, given their predominance, my place of departure is the street cops. It is in their hands that most of our Fourth Amendment freedoms lie.

D. The Lay of the Land

After this Introduction, Part II summarizes research on how people and police make judgments based upon their first impressions of others’ activities and nature. Part II addresses such matters as individual differences in ability to make accurate first impressions, the role of biases based upon facial features, the fundamental

39 See infra Part III.
40 See infra text accompanying notes 428–33.
41 Cf. NEIL K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY (1994) (emphasizing the importance of, and engaging in an extended analysis of, comparative institutional competence analysis to choose among imperfect alternatives).
42 Cf. id. at 147–49 (analyzing the importance of identifying the least flawed institution). A more thorough comparative institutional analysis is a task I undertake in a series of follow-up, in-progress articles.
43 See CARSON & DENHAM, supra note 26, at 61 (patrol officers, not detectives, do most of the arresting).
44 See infra text accompanying notes 399–401, 425–28.
attrition error, the problem of "cognitive load," empathy reduction, and police resistance to changing first impressions even when faced with countervailing evidence.\textsuperscript{45}

Part IIIA seeks to balance the scales by examining the virtues of police intuition and experience. These virtues include: avoiding rigid, mechanical thinking; preventing complacency; spotting behavioral patterns; recognizing anomalies; generating new ideas; and evoking stories that bring rich context to an otherwise unduly narrow focus on an arbitrarily small set of determinative factors.\textsuperscript{46}

Part IIIB is an initial attempt at a cost–benefit analysis that seeks ways to marry the virtues, and divorce the vices, of each way of thinking (intuitive and systematic) into a more harmonious matrimonial whole. To do so, Part IIIB further elaborates on some of the costs and benefits of cognitive streetlights and shadows. Part IIIB has separate sections addressing heuristics (cognitive shortcuts); when and why formal ways of thinking outperform intuitive ones; how intuition can lead to imagination, which can lead to more systematic thinking; the importance of being aware of situational factors that can skew one's perceptions; and the cognitive and political benefits of a requirement that police identify "specific, articulable facts" justifying their judgments.\textsuperscript{47}

Each of these sections suggests advantages for a modest duty to investigate, supplemented by duties of making reasonable evaluation efforts once sufficient information is gathered and of rendering reasonable reports expressly explaining officers' reasons for actions taken. These duties are the subject of Part IV.\textsuperscript{48}

Part V, the conclusion, summarizes the preceding arguments, makes tentative recommendations for change, and urges the continuing advantages in future work on policing in recognizing that police are indeed people too.\textsuperscript{49}

II. THE COGNITIVE PSYCHOLOGY OF FIRST IMPRESSIONS

Any discussion of first impressions must begin with Malcolm Gladwell's best-selling book, \textit{Blink}.\textsuperscript{50} \textit{Blink} popularized the idea that our intuitive, quick, unconscious judgments are often right—indeed more accurate than many of our conscious, deliberate judgments.\textsuperscript{51} That argument, made primarily via anecdote,
was the spin used to sell his book, a marketing effort that ignored Gladwell's caution that the quick, intuitive route to truth is also often wrong and that it can be difficult to ascertain in any particular case whether one's intuition is trustworthy or flawed.

Nevertheless, some well-respected academics have extended Gladwell's reasoning to policing. These academics argue that courts should give police "hunches" more deference, for "gut" police reactions will be more accurate than ones made during lengthier deliberations. But this approach ignores the many risks of error in making judgments based on first impressions, which is the situation facing most police; the difficulty of telling when "hunches" are in error and when not; and the constitutional mandate of the Fourth Amendment to limit police discretion rather than blindly defer to it. This section focuses on nine sources of error in police first impressions of potential suspects: individual variability in the skill of making such judgments accurately, the fundamental attribution error, the influence of facial features on personality judgments, egocentrism, self-fulfilling prophecies, weak motivation to be accurate, cognitive load, weak ability to effectively distinguish truth from lies, and resistance to admitting a mistake. This section concludes with a first look at how a robust individualized suspicion mandate can, at the same time, help to reduce or correct the bad influence of these sources of error.

A. People Vary in Unpredictable Ways in Their Ability to Make Accurate First Impressions

It is true that some people are, at times, reasonably good at making certain judgments based on first impressions. But they are also often quite bad at doing so. Moreover, first impressions can involve at least five major attributes, namely,
the subject's emotions, personality, intelligence, mental states, and use of
deception. Although there is some disagreement on the point, most researchers
believe that individuals vary in their ability to make accurate judgments based
upon first impressions. Yet there are low correlations between a person's ability
to judge one domain accurately and his ability to do so regarding another domain.

Thus, a person good at judging others' mental states may be poor at judging
their personalities. But both these and other factors are relevant to police judging
whether a crime has occurred or is impending. In addition, individuals' self-
knowledge about the relative degree of accuracy of their ability to make judgments
concerning each of the five major attributes upon first impression is also poor.

points out, however, that mistaken first impressions are sometimes socially beneficial, certain
delusions or errors promoting better emotional adjustment and life satisfaction. See id. Gray also
argues that global accuracy statements are hard to make because both situational and dispositional
factors, the former being particularly subject to variation, play a role. See id. Gray's conclusion is
this: "In sum, first impressions are sometimes accurate and sometimes inaccurate. Accuracy depends
partly on the construct being judged, partly on the information available to the perceiver, partly on
the perceiver's motivation and ability to understand others, and partly on a host of other factors not
covered in this review." Id. at 122.

58 See id. at 107.
59 See Hall & Andrzejewski, supra note 56, at 91.
60 See id.; Judith A. Hall, The PONS Test and the Psychometric Approach to Measuring
Interpersonal Sensitivity, in INTERPERSONAL SENSITIVITY: THEORY AND MEASUREMENT 143, 143–58

Concerning personality, it is worth noting that,
where subjects are not dissembling, many observers can, under appropriate circumstances, make
reasonably accurate judgments about certain personality traits, such as extraversion, upon first
impression, while other traits, such as neuroticism or openness, are harder to judge accurately in most
situations. Gray, supra note 57, at 110. Furthermore, there is some evidence that, as to personality
traits, "gut" reactions can sometimes be more accurate than deliberation for making personality
judgments based on minimal information. Id. at 111; Nalini Ambady, The Perils of Pondering:
Intuition and Thin Slice Judgments, 21 PSYCHOL. INQUIRY (forthcoming 2010) (constituting one of
the few, perhaps the only, study on this question). On the other hand, "with increasing acquaintance
comes increasing accuracy—at least when self-assessments are used as the gold standard," Gray,
supra note 57, at 110, a result probably stemming "from increased exposure to the target person in a
range of diverse environments." Id. Importantly, as well, the absence of dissembling cannot readily
be assumed, particularly in police-citizen interactions, and most people are simply not very good lie
detectors. Id. at 116.

62 See TASLITZ ET AL., supra note 17, at 185–226; Taslitz, supra note 13 (manuscript at 48–
52) (illustrating some of the sorts of factors police and courts may rely on in establishing probable
cause).

63 Hall & Andrzejewski, supra note 56, at 96 ("Unfortunately, self-insight into AFI [accuracy
of first impressions] is relatively weak."); Judith A. Hall et al., Psychosocial Correlates of
Interpersonal Sensitivity: A Meta-Analysis, 33 J. NONVERBAL BEHAV. 149, 149 (2009); Ronald E.
Riggio & Heidi R. Riggio, Self-Report Measurement of Interpersonal Sensitivity, in INTERPERSONAL
SENSITIVITY: THEORY AND MEASUREMENT, supra note 60, at 127–40. Hall and Andrzejewski explain
this lack of self-insight thus:

Why self-insight for this skill is only mediocre is an interesting question. Perhaps
in real life, people do not get enough timely feedback on their AFI to develop accurate
People generally, and police specifically, have confidence in their abilities to judge others that is often undeserved, and they are unlikely to see themselves as worse judges than their compatriots. Furthermore, even people shown to be good at having some accurate initial impressions are accurate only when their targets are telling the truth. Perceivers’ accuracy plummets when targets lie.

Why, then, are people, including police, so often bad and inconsistent in judging others’ thoughts, likely actions, personalities, and use of deception? This subject occupies most of the remainder of this section.

B. Some Major Causes of Inaccurate First Impressions

1. The Fundamental Attribution Error

There are a number of likely reasons for high inaccuracy rates in making judgments based upon first impressions. Among the most important of these reasons is the “fundamental attribution error.” This error is the tendency, especially in American culture, to judge an individual’s actions as stemming from fundamental personality traits rather than from the situation in which she finds herself. Moreover, people are willing to make quick and confident judgments of a subject’s personality trait based on a very limited data sample. They will also
overgeneralize, treating one perceived negative personality trait as indicative of an overall negative personality across many criteria.\footnote{71}{Taslitz, supra note 12, at 184 ("Moreover, because of the 'devil's horn' and 'halo effects,' evidence of a bad or good character trait may be understood as marking a person's entire personality as bad or good."). Race can magnify the problem. See Rebecca Holland-Blumoff, \textit{Social Psychology, Information Processing, and Plea Bargaining}, 91 MARQ. L. REV. 163, 180 (2007) (describing the "ultimate attribution error" as the tendency to view out-group members in particularly stereotypical ways).}

Many early judgments of this kind are based on facial expressions.\footnote{72}{Leslie A. Zebrowitz & Joann M. Montepare, \textit{First Impressions from Facial Appearance Cues}, in \textit{FIRST IMPRESSIONS}, supra note 56, at 171, 183–84.} If, therefore, someone in a rush believes that he has been unjustly stopped by the police, the stopee may react with an angry or irritated scowl.\footnote{73}{Taslitz, supra note 27, at 1117–18.} There is a good chance that the officer will interpret the person stopped as being "unsociable, unfriendly, unsympathetic, cold, [and] forceful."\footnote{74}{Zebrowitz & Montepare, supra note 72, at 184 ("Thus, an angry person may be viewed not only as likely to act momentarily in an unaffiliative or dominant way but also as possessing enduring low affiliative or high dominant traits (e.g., being unsociable, unfriendly, unsympathetic, cold, forceful.").} These traits may lead the officer to dislike the person stopped and to suspect him of wrongdoing.\footnote{75}{See Paul F. Secord, \textit{Facial Features and Inference Processes in Interpersonal Perception}, in \textit{PERSON PERCEPTION AND INTERPERSONAL BEHAVIOR} 300, 306–08 (Renato Tagiuri & Luigi Petrullo eds., 1958) (describing the process of "temporal extension" in which "the perceiver regards a momentary characteristic of the person as if it were an enduring attribute"); Zebrowitz & Montepare, supra note 72, at 184 (noting the continuing modern relevance of Secord's "temporal extension" idea); Taslitz, supra note 27 at 1109–12 (making a similar point about facial anger or resentment, but combined with racialized perceptions and using the language of the fundamental attribution error).}

2. Facial Type

Familiarity with facial types also affects personality judgments.\footnote{76}{Zebrowitz & Montepare, supra note 72, at 188–89 (describing the "familiar face overgeneralization (FFO) hypothesis, which holds that \textit{perceived} familiarity as well as actual familiarity can influence impressions of faces"). The FFO hypothesis argues that we react to strangers upon initial contact based upon their resemblance to known individuals. \textit{Id.} at 188; see generally Leslie A. Zebrowitz, \textit{Physical Appearance as a Basis of Stereotyping}, in \textit{STEREOTYPES AND STEREOTYPING} 79 (C. Neil Macrae et al. eds., 1996); Leslie A. Zebrowitz, \textit{Reading Faces: Window to the Soul?} (1997). For example, peers were deemed more trustworthy when their photos were morphed to look more like the perceiver, people preferred job candidates whose faces resembled those of persons who had treated the perceiver kindly, and students expected more fairness from a professor whose face resembled the prototypical face of other professors known to be fair. Zebrowitz & Montepare, supra note 72, at 188.} Persons living in racially segregated neighborhoods are likely less familiar with the faces of
other racial groups.\textsuperscript{77} That lack of familiarity leads to a dislike of those faces relative to in-group faces.\textsuperscript{78} In particular, various studies have shown that Whites react more negatively to “Afrocentric” faces (those displaying features stereotypically associated with African-Americans) than to non-Afrocentric faces.\textsuperscript{79}

These facial biases can likewise bias memory and narrative creation.\textsuperscript{80} One study illustrating this point showed experimental subjects four versions of a story embedded with a composite photograph of a Black male.\textsuperscript{81} The stories varied in the degree of “stereotypic association with Blacks and whether or not it described a crime.”\textsuperscript{82} Subjects were then asked to use a computer program to reproduce the face of the Black male in the story of interest, varying such things as nose, mouth, and skin tone.\textsuperscript{83} The composite photograph in each story had been crafted to be at the midpoint of the Afrocentric/Eurocentric features continuum.\textsuperscript{84}

Subjects who read stories about crime constructed faces that were far more Afrocentric than the original face shown in the photograph.\textsuperscript{85} By contrast, subjects

\textsuperscript{77} Zebrowitz & Montepare, supra note 72, at 188–89 (making this point and noting its consistency with research showing that “people prefer faces that have become familiar through repeated exposure” and that “the enhanced liking of known faces that results from exposure can generalize to similar-looking strangers”).

\textsuperscript{78} See, e.g., Yair Bar-Haim et al., Nature and Nurture in Own-Race Face Processing, 17 Psychol. Sci. 159, 159 (2006) (showing that even three-month-old infants had a visual preference for own-race faces, though only if the infants lived in racially-segregated areas); Leslie A. Zebrowitz et al., The Contribution of Face Familiarity to Ingroup Favoritism and Stereotyping, 25 Soc. Cognition 306, 306 (2007) (demonstrating that the average familiarity of face-raters with a given race contributed to in-group favoritism and racial stereotyping). These own-race biases where familiarity with other-race faces is low were found among Korean-Americans and African-Americans as well as Whites. See Zebrowitz & Montepare, supra note 72, at 189. Facial familiarity can reduce the effects of negative racial stereotypes and increase the effect of positive ones. \textit{Id.}


\textsuperscript{81} Mary Beth Oliver et al., The Face of Crime: Viewers’ Memory of Race-Related Facial Features of Individuals Pictured in the News, 54 J. Comm. 88, 88 (2004).

\textsuperscript{82} Maddox & Dukes, supra note 80, at 224–25 (describing the Oliver, Jackson, Moses, and Dangerfield study).

\textsuperscript{83} Id. at 225; Oliver et al., supra note 81, at 95–97.

\textsuperscript{84} Maddox & Dukes, supra note 80, at 225; Oliver et al., supra note 81, at 97–98.

\textsuperscript{85} Maddox & Dukes, supra note 80, at 225; Oliver et al., supra note 81, at 98–99.
who read non-crime stories did not construct faces that were more Afrocentric than the original, no matter how racially “stereotypic” the stories were.  

In addition to this association between racialized facial phenotypic features and crime, culture also plays a role. Persons from different subcultures often misperceive the meaning of one another’s facial expressions. Moreover, individual perceivers differ in the degree to which they make and rely upon stereotypes.

Police are subject to the same influences. In one particularly fascinating study, a majority White sample of police officers was primed with either crime- or non-crime-related words during a talk. They were then presented for a brief period of time with a series of photos, each in a pair including one Black and one White photograph, facing side by side. Next, the officers were asked whether they recognized any faces in two lineups, one with Black faces, one with White, as from the original photo series. In each lineup, only one face from the earlier photo-series-examination task (the target) was used. The target face was accompanied by four distracters, two with faces more racially stereotypical than the target’s face, two with faces less racially stereotypical. Here is how two commentators described this experiment’s outcome: “The results revealed that participants’ choices of Black faces during the recognition task varied as a function of exposure to the primes. Those exposed to the crime-related primes were more likely to choose stereotypically Black distracters as compared to those exposed to the primes unrelated to crime.”

Similarly, another study asked a different sample of officers to describe various faces as more or less criminal-looking. The officers described highly

86 Maddox & Dukes, supra note 80, at 225; Oliver et al., supra note 81, at 99–101.
87 Gray, supra note 57, at 115.
88 Id. ("Although there is evidence for cross-cultural recognition of emotions, it appears that emotional expressions may lose some of their meaning when translated across cultural boundaries." (citation omitted)).
89 See Christine Jolls & Cass R. Sunstein, The Law of Implicit Bias, in CRITICAL RACE REALISM: INTERSECTIONS OF PSYCHOLOGY, RACE, AND LAW 206, 207–08 (Gregory S. Parks et al. eds., 2008) (noting evidence of individual differences in racial bias and stereotyping and evidence of its sometimes connection to biased behavior); but see David A. Kenny & Tessa V. West, Zero Acquaintance: Definitions, Statistical Model, Findings, and Process, in FIRST IMPRESSIONS, supra note 56, at 129, 143 (arguing that individual differences are weak in “zero acquaintance studies”).
90 See Maddox & Dukes, supra note 80, at 224.
91 Eberhardt et al., supra note 79, at 885–88 (Study 4).
92 Maddox & Dukes, supra note 80, at 224 (summarizing this study).
93 Id.
94 Id.
95 Id.
96 Id.
97 Eberhardt et al., supra note 79, at 888–89 (Study 5).
stereotypic Black faces as looking more like criminals than they did for low stereotypic Black faces.98

3. Egocentrism

A second cause of error is egocentrism—the tendency to assume that others share one’s knowledge, preferences, and attitudes.99 In some settings, that assumption may be a fair one.100 But in other settings, such as middle-class White officers policing poor Blacks, the assumption may be seriously flawed.101 Where such knowledge, preferences, and attitudes differ, misunderstandings will arise, and police will lack the shared experience and values needed to understand a particular person’s intentions.102

One example is that of supposed flight. Police perceive any quick, sudden, or unexpected move as suspicious.103 They are particularly concerned about what they perceive to be flight away from them, assuming that such flight indicates consciousness of guilt.104 That assumption may hold true in a local culture that respects and trusts police to do the right thing. But in a culture, like that in many poor Black neighborhoods, where police are distrusted both for under-protecting the community and racially profiling its members while treating them with undue aggression, flight from police may make much more sense.105 Rightly or wrongly, police may be perceived as a source of danger, too willing to stop the innocent,
humiliate them, or trap them into saying or doing things they do not mean.\textsuperscript{106} Even if it is not the officer whom the residents fear, they may recognize that the officer’s presence might mean that someone is up to no good, seeing it as not worth staying in the area when a gun fight breaks out.\textsuperscript{107} Many poor Black children are indeed raised to be wary of the police, to view avoiding them as preferable to dealing with them.\textsuperscript{108} Police from a sharply different cultural background in which the officer is one’s friend may thus overemphasize flight, misconstruing its meaning by seeing an effort to flee to safety as an effort to elude capture.\textsuperscript{109}

Part of the problem, of course, is a failure of empathy.\textsuperscript{110} Whether a crime has been committed usually turns on the suspect’s mental state, not merely his acts.\textsuperscript{111} Mental states, in the commonsense notion of the term, including motivations, can also make a particular crime more likely to occur.\textsuperscript{112} Yet different social backgrounds make empathy harder.\textsuperscript{113} When empathy fails, observers judge others based more on stereotypes than a true understanding of the others’ nature or situation.\textsuperscript{114} Failed empathy is inconsistent, therefore, with the kind of individualized judgment that the probable cause and reasonable suspicion concepts demand.\textsuperscript{115}

\textsuperscript{106} \textit{See generally} Illinois v. Wardlow, 528 U.S. 119, 126–40 (2000) (Stevens, J., concurring in part, dissenting in part) (outlining reasons for fleeing from police); Lenese C. Herbert, \textit{Can’t You See What I’m Saying?: Making Expressive Conduct a Crime in High-Crime Areas}, 9 GEO. J. ON POVERTY L. & POL’Y 135 (2002) (arguing that racial minority flight from the police in certain neighborhoods is best understood as an act of protest—defiance of police as an institution perceived to be both unduly passive in protecting residents from crime and unduly aggressive in assuming resident guilt and pursuing proof of that assumption).

\textsuperscript{107} \textit{See Taslitz, supra note 105, at 2297–2301.}

\textsuperscript{108} \textit{See} JIM WALLIS, THE SOUL OF POLITICS: BEYOND “RELIGIOUS RIGHT” AND “SECULAR LEFT” 90–93 (Harvest Book 1995) (1994) (telling “Butch’s story,” a tale told to a White, middle-class pastor by a Black woman in a lower-income neighborhood about how she raised her son to flee or hide from the police).

\textsuperscript{109} \textit{See Taslitz, supra note 105, at 2299–2301.}


\textsuperscript{111} \textit{See Taslitz, supra note 36, at 8–12.}

\textsuperscript{112} \textit{Id.}

\textsuperscript{113} \textit{See Taslitz, supra note 110, at 433–34.}

\textsuperscript{114} \textit{Id.} at 434.

\textsuperscript{115} \textit{See id.; Taslitz, supra note 13 (manuscript at 40–52) (defining “individualized suspicion” and explaining its role in the probable cause and reasonable suspicion determinations).}
4. Self-Fulfilling Prophecies

Error can also arise from “self-fulfilling prophecies.” Given an officer’s flawed assumption of common knowledge with his target and the influence of the fundamental attribution error, the officer may believe that the target is up to no good, at least subconsciously conveying that belief to the target via body language. The target picks up on these cues, again perhaps subconsciously, and behaves nervously or resentfully—just as the officer expects. That behavior confirms the officer’s suspicions, further escalating the cycle of self-fulfillment. Yet neither party is likely aware of this process.

The officer’s own influence on others’ behavior, prompting action that the officer sees as suspicious, is simply not on most officers’ radar screens. If it were, they would act more carefully, attempting to avoid unwittingly influencing suspect behavior consistent with innocence to become behavior that appears more consistent with guilt. Indeed, officers might see some of their behavior as wisely changing a target’s behavior. The target’s turn toward more suspicious behavior is seen by the officer as the target simply revealing his true nature. The officer in turn takes credit for the target revealing his true colors, never considering that the truest colors might have been those shown before the confrontational officer made his appearance.

5. Motivation and Personal Responsibility for Judgments

High motivation to understand others can, however, increase accuracy in judging personality, probably because such motivation makes perceivers “behave in ways that make their interaction partner feel more comfortable in divulging
relevant cues to personality."

One way to increase accuracy motivation is to hold perceivers "personally responsible for the accuracy of their impressions," for then they "devote more effort to forming them, leading to more individuating impressions, especially when the target's behavior [does] not match the initial expectancy or stereotype." This observation suggests that structuring police reward systems—both material and psychic rewards—to encourage accurate, individuated judgments about targets' personality traits may improve officer judgments on at least the attribute of personality, even upon first impression.

Under such conditions, officers may seek more individuating information in

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126 Gray, supra note 57, at 111; see also Max Weisbuch et al., *Remnants of the Recent Past: Influences of Priming on First Impressions*, in *FIRST IMPRESSIONS*, supra note 56, at 289, 302–03. Professor Weisbuch and colleagues agree that most people would prefer that their first impressions "be based on [the target] individual's behaviors and characteristics rather than on an irrelevant remnant of recent experience." *Id.* at 302. But, they further explain the "extent to which people have this motivation, however, varies by person and by situation," with most having a fairly weak accuracy motivation, one akin to the desire to avoid biases in preferences for recreational activities. *See id.*

On the other hand, where strong motivation is present:

Increases in accuracy motivation should lead to increasingly accurate first impressions, unbiased by recent environmental cues. That is, accuracy motivation prompts (1) systematic processing and careful consideration of a target's characteristics and behaviors, (2) consideration of a wide variety of alternative possibilities, and/or (3) constant revising of the impression. All of these processes may lead to correction processes or the consideration of more information (which would dilute the impact of the prime).

*Id.* at 302 (citations omitted).

127 Harris & Garris, supra note 116, at 162 (citation omitted) (emphasis added); see Susan T. Fiske et al., *The Continuum Model: Ten Years Later*, in *DUAL PROCESS THEORIES IN SOCIAL PSYCHOLOGY* 231–49 (Shelly Chaiken & Yaacov Trope eds., 1999) (supporting this point); see Stephanie Madon et al., *Stereotyping the Stereotypic: When Individuals Match Social Stereotypes*, 36 J. APPLIED SOC. PSYCHOL. 178, 178 (2006) (noting motivational-accuracy effects can be particularly pronounced when the target's behavior fails to match that of the initial expectancy of stereotype); *see also* Thomas E. Ford & Arie W. Kruglanski, *Effects of Epistemic Motivations on the Use of Accessible Constructs in Social Judgment*, 21 PERSONALITY & SOC. PSYCHOL. BULL. 950, 950–52 (1995) (demonstrating that telling subjects prior to observing a target that they should form as accurate an impression of him as they can because they will be asked to justify their impression to the experimenter increases first impression accuracy). One important influence on first impressions, it should be noted, is recent experience or "prime." Weisbuch et al., *supra* note 126, at 289–90. There are two major kinds of primes: "abstract trait" primes and "exemplar" primes. *Id.* at 291. These traits and exemplars are most accessible to memory, thus influencing one's impressions of his or her most recent acquaintances. *See id.* If you are primed with negative concepts, such as Bill's dangerousness, that too will increase the chances of your perceiving George as dangerous too. *Id.* at 291–92. Strong accuracy motivation may sometimes reverse the impact of abstract trait primes, but has "little if any effect on the impact of exemplar trait primes." *Id.* at 303; *see* Diederik A. Stapel & Willem Koomen, *When Stereotype Activation Results in (Counter)Stereotypical Judgments: Priming Stereotype-Relevant Traits and Exemplars*, 34 J. EXPERIMENTAL SOC. PSYCHOL. 136, 136 (1998).

specific cases and learn more effectively from training designed to encourage more individualized judgments about personality.\footnote{See infra text accompanying notes 346–67, 482–548. The argument might be made that simple professional pride will motivate police to get the answer to the question “who did it?” right. But motivation to catch the right guy is not the same as motivation to individuate the suspect, and, as the first impressions research suggests, properly structured incentives can help to improve motivation to get that judgment right. An officer can act in a perfectly good faith belief that a suspect is up to no good, but that belief may stem from subconscious biases, stereotypes, and other flawed judgments.}

Accuracy may increase further with greater exposure to the target, particularly if she is observed in a diverse environment, a luxury that police often do not have.\footnote{See Gray, supra note 57, at 110 (discussing increased exposure); Andrew E. Taslitz, \textit{Racial Profiling, Terrorism, and Time}, 109 PENN ST. L. REV. 1181, 1196–97 (2005) (noting that police often act under time urgency, a context that leads to rigid, less-adaptive thinking, too-ready discarding of alternative causes of action, a narrowed field of attention, an enhanced sense of threat, an increased reliance on stereotyping, and an overall decline in cognitive functioning).} Getting to know a person takes time, something police lack when responding to a crime in progress.\footnote{See supra text accompanying notes 355–67, 421–28, 454–548.} Still, where circumstances permit, more observation time, combined with motivational rewards and personal police accountability for making individualized judgments, should lead to improving those judgments.\footnote{See Gray, supra note 57, at 121 (“The perceiver must \textit{detect} the relevant available information.”); \textit{id.} at 122 (“Accuracy depends partly on \ldots the information available to the perceiver \ldots.”).} This last observation reflects the more general point that more \textit{relevant} information can increase the accuracy of many types of first-impression judgments.\footnote{See id.; Daniel T. Gilbert \& Patrick S. Malone, \textit{The Correspondence Bias}, 117 PSYCHOL. BULL. 21, 21 (1995) (concluding that cognitively busy observers automatically make dispositional, rather than situational, inferences and later fail to correct their initial impressions); Daniel T. Gilbert et al., \textit{On Cognitive Busyness: When Person Perceivers Meet Persons Perceived}, 54 J. PERSONALITY

6. Cognitive Load

Limits on “cognitive load” also impair accuracy.\footnote{See Harris \& Garris, supra note 116, at 162–63.} Cognitive load refers to the number of demands simultaneously made upon the human mind.\footnote{See \textit{id.}} Perceivers making judgments while stressed, preoccupied with other matters, or multitasking—all likely to be common features of police work—make quick judgments, “using biases and stereotypes, and consistent with impressions formed of similar individuals.”\footnote{See \textit{id.} at 163.} Under such circumstances, observers may ignore, for example, obvious (and innocent) situational causes of nervousness, attributing it to character.\footnote{See \textit{id.}} Moreover, cognitively busy observers notice events in the
environment that confirm their initial expectations, ignoring contradicting evidence. When cognitive overload and low accuracy motivation occur simultaneously, the result can be “especially damaging to perceivers’ tendency to make individuating impressions.” Given the many simultaneous cognitive demands made on police patrolling a beat under circumstances of time urgency—for example, complying with the Constitution, watching the suspect, following departmental guidelines, protecting against danger—police stopping and frisking are likely to do so under circumstances of heavy cognitive load, therefore suffering from all its incapacities.

Interestingly, persons who are more empathetic and less racially, ethnically, or otherwise prejudiced are more likely to make accurate judgments of the emotional meaning conveyed, for example, by other-race faces. Although they too are subject to the distortions of high cognitive load, these distortions are likely to be less than those of persons lacking adequate empathy and egalitarianism. They are also more likely to be “more democratic and less dogmatic,” suggesting a greater willingness to consider other viewpoints, avoid stereotyping, and be open to revising judgments than less empathetic persons. Indeed, injections into male perceivers of the hormone oxytocin, which enhances personal behavior and affiliation, substantially improved their ability to accurately gauge

& SOC. PSYCHOL. 733, 734–36 (1988) (cognitively busy observers wrongly attributed the nervousness of a woman on videotape to her disposition while more cognitively idle observers correctly attributed her nervousness to the situation).

138 See Harris & Garris, supra note 116, at 163 (“Presumably, being under cognitive load prevents perceivers from noticing or attending to expectancy-discrepant behavior on the part of the target and therefore being less likely to revise their expectancies or impressions of the target.”); Monica J. Harris & Rebecca Perkins, Effects of Distraction on Interpersonal Expectancy Effects: A Social Interaction Test of the Cognitive Busyness Hypothesis, 13 SOC. COGNITION 163, 163 (1995) (perceivers’ cognitive busyess resulted in their finding more behavioral confirmation in the target’s behavior than when not cognitively busy).

139 Harris & Garris, supra note 116, at 163; Kristen N. Moreno & Galen V. Bodenhausen, Resisting Stereotype Change: The Role of Motivation and Attentional Capacity in Defending Social Beliefs, 2 GROUP PROCESSES & INTERGROUP REL. 5, 12–13 (1999) (finding greatest stereotyping in perceivers having low motivation and lower-still attentional capacity).


141 See Hall & Andrzejewski, supra note 56, at 95 (“Individuals high in AFI [accuracy of first impressions] are also more empathic, though . . . there are exceptions.”) (internal quotation marks omitted); id. at 97–98 (those high in AFI use less gender stereotyping, display less social prejudice, including less prejudice against African-Americans and those of Jewish ethnicity).

142 See id.

143 Id. at 98; see Robert Rosenthal et al., Sensitivity to Nonverbal Communication: The PONS Test (1979) (offering major empirical support for this point).

144 See Hall & Andrzejewski, supra note 56, at 97–98 (summarizing literature on reduced prejudice and AFI accuracy); Taslitz, supra note 110, at 431–36 (analyzing the cognitive advantages of empathy).
targets’ mental states from facial cues. Researchers speculate that the improved accuracy comes from a greater motivation to understand others and take the time to engage in social interactions in order to gather the information needed for accurately “reading” others’ minds. Giving police regular oxytocin injections does not seem to be a practical solution to lowering police error rates. On the other hand, because police should naturally share the general human variability in empathy and egalitarianism, that too raises reason for caution in concluding that police generally merit deference in their judgments based upon first impressions.

7. Lie Detection

Remember that even those studies finding accurate initial impression formation by some people under certain conditions involved truthful targets. But most people are notoriously bad at accurately divining deception, doing little better than chance. There are several reasons for this poor performance. Importantly, perceivers rarely receive prompt, objective feedback on their deception judgments, depriving them of the opportunity to learn from their mistakes. They also lack “cognitive flexibility,” lacking the time and energy to “gather all observable cues—from the verbal and nonverbal streams of behavior—and then reconsider this evidence in light of information about the deceiver’s goals, pursuits, and personal character.” But “[p]erceivers often find it difficult to step this far outside their own perspective.” Cues to deception may also be so “idiosyncratic” that perceivers simply cannot develop a general judgmental strategy to apply across persons and situations. Accuracy can improve over a substantial period of time and in an increasingly close relationship, options rarely

145 Gregor Domes et al., Oxytocin Improves “Mind-Reading” in Humans, 61 BIOLOGICAL PSYCHIATRY 731, 732 (2007) (finding that a single dose of oxytocin substantially improved men’s ability to interpret facial cues to mental states); Larry J. Young & Zuoxin Wang, The Neurobiology of Pair Bonding, 7 NATURE NEUROSCIENCE 1048, 1048 (2004) (noting oxytocin’s critical role in prosocial behavior and affiliation); see Bhismadev Chakrabarti & Simon Baron-Cohen, The Biology of Mind Reading, in FIRST IMPRESSIONS, supra note 56, at 57 (summarizing the biology of empathy, especially emphasizing gendered differences in empathizing ability).

146 Gray, supra note 57, at 114; see generally Thomas R. Insel & Larry J. Young, The Neurobiology of Attachment, 2 NATURE REVIEWS NEUROSCIENCE 129 (2001) (analyzing data supporting this point).

147 See supra text accompanying notes 65–66.

148 See Gray, supra note 57, at 116; Charles F. Bond, Jr. & Bella M DePaulo, Accuracy of Deception Judgments, 10 PERSONALITY & SOC. PSYCHOL. REV. 214, 214 (2006) (finding in the growing body of literature an average lie detection accuracy rate of 54%).

149 Gray, supra note 57, at 116.

150 Id.


152 Gray, supra note 57, at 116.
available to police. One longitudinal study, for example, found that increased deception-detection accuracy occurred over five months of additional time to develop a friendship but only for close friends.

Police often believe that their training and experience make them better lie detectors. They are wrong:

On the contrary, in a meta-analysis of the literature, Aamodt and Custer found that "professional lie catchers" (such as police officers, detectives, judges, secret service agents, and parole officers) were no more accurate at detecting deception than were students and other citizens. The professionals had an average accuracy rate (56%) only slightly higher than novices (54%). It could be that formal training disrupts the normal ways in which we learn to recognize cues to deception. More specifically, formal training may focus our attention on "salient and plausible," but nondiagnostic cues.

Of course, there may be ways to improve lie-detection training. A few social scientists believe that they can improve such training via a complex and unusual training process—one that may therefore be impractical for most sorts of daily policing. Moreover, these methods and others may require use of equipment not

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153 See id. (making this point about close friends, but noting that it may not extend to mere colleagues or friendly acquaintances).

154 Id.; D. Eric Anderson et al., The Development of Deception Detection Skill: A Longitudinal Study of Same-Sex Friends, 28 PERSONALITY & SOC. PSYCHOL. BULL. 536, 539 (2002) (finding that over a five-month period close friends' accuracy in detecting each others' lies increased from 47% to 61%, while less close friends showed a small decrease in lie-detection accuracy and, overall, accuracy did not improve).

155 See PETER B. AINSWORTH, PSYCHOLOGY AND POLICING 99–101 (2002) (noting that most law enforcement officers assume that suspects initially lie but that they can eventually be persuaded to admit their guilt); cf. Gray, supra note 57, at 116 ("One might expect expertise, experience, and formal training to bolster lie detection accuracy.").

156 Gray, supra note 57, at 116–17 (citation omitted). Most of the deception detection literature relies on experimental laboratory studies, "when the liar's motivation to be successful may be minimal." Id. at 117. One meta-analysis found that in high-stakes situations, where a liar necessarily has a greater motivation to succeed, the liar becomes tenser, using less eye contact and a higher-pitched voice, thus arguably making deception more transparent. Bella M. DePaulo et al., Cues to Deception, 129 PSYCHOL. BULL. 74, 97 (2003). Another study reached similar conclusions concerning real-life high-stakes situations, including police interrogations. See Samantha Mann et al., Detecting True Lies: Police Officers' Ability to Detect Suspects' Lies, 89 J. APPLIED PSYCHOL. 137, 137–38 (2004). "It is," however, "as yet unclear whether this greater transparency during higher-stakes situations results in greater accuracy on the part of perceivers." Gray, supra note 57, at 118.

157 See Gray, supra note 57, at 117 (summarizing the work of Professor Paul Ekman and other leading scholars in this field); Hall & Andrezewski, supra note 56, at 99 (concluding that training people in nonverbal cue recognition has achieved "some" measure of success in improving first impression accuracy, but "it is not known how lasting or how generalizable such effects are").
now readily available to police departments and often take more time to use effectively than is available to officers making target-deception judgments.\textsuperscript{158} Apart from deception detection, it is interesting to note that advanced theatrical training—again not likely a common experience among officers—improves accuracy in making judgments about the nature of social relationships, such as the existence and degree of rapport.\textsuperscript{159} This improvement may occur because "theatrical training sensitizes [people] to the meaning of particular gestures, facial displays, and vocal patterns."\textsuperscript{160}

C. Resistance to Changing First Impressions

Once initial impressions have been made, they are hard to change.\textsuperscript{161} This observation is especially worrisome because first impressions can be made before even meeting a person.\textsuperscript{162} "Reputations, rumors, job or school applications, or offhand comments made by friends all provide perceivers with a rich set of descriptive information—information that may or may not accurately describe the target's personality."\textsuperscript{163} This situation may be common among the police, who may rely on neighborhood "snitches" (often paid or otherwise confidential informants), gossip, or reports of a suspect's isolated, seemingly bad acts before ever meeting the person.\textsuperscript{164}

One well-respected theory, the "continuum model,"\textsuperscript{165} explains the subsequent cognitive processes as follows: after making an initial category-based judgment, a perceiver, if motivated to do so, will assess the target in greater detail.\textsuperscript{166} But the

\textsuperscript{158} See generally ALEX PENTLAND WITH TRACY HEIBECK, HONEST SIGNALS: HOW THEY SHAPE OUR WORLD app. at 111 (2008) (using a new device, the "sociometer," Professor Pentland recorded micro-expressions and movements of his subjects to detect unconscious "honest" social signals, a back-channel form of communication revealing such things as when subjects are bluffing).

\textsuperscript{159} See Gray, supra note 57, at 120.

\textsuperscript{160} Id.; see Mark Costanzo, Training Students to Decode Verbal and Nonverbal Cues: Effects on Confidence and Performance, 84 J. EDUC. PSYCHOL. 308, 308 (1992). Studying music or dancing also may improve first impression accuracy, and watching a good deal of television may improve accuracy in judging the meanings of facial expressions. Hall & Andrzejewski, supra note 56, at 99.

\textsuperscript{161} See Harris & Garris, supra note 116, at 157.

\textsuperscript{162} Id. at 164.

\textsuperscript{163} Id.

\textsuperscript{164} See generally ALEXANDRA NATAPOFF, SNITCHING: CRIMINAL INFORMANTS AND THE EROSION OF AMERICAN JUSTICE 1–4, 15–17 (2009) (describing how and why informants are used in the American justice system and examining the social costs and benefits of doing so); Taslitz, supra note 27, at 1132–37 (comparing the social processes involved in informant use to those involved in everyday gossip).

\textsuperscript{165} Susan T. Fiske & Steven L. Neuberg, A Continuum of Impression Formation, from Category-Based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation, in ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 1, 4–8 (Mark P. Zanna ed., 1990); Fiske et al., supra note 127, at 231.

\textsuperscript{166} Harris & Garris, supra note 116, at 162.
perceiver’s bias in this assessment will be toward confirming initial judgments rather than challenging them, and this should generally be as true for professionals as it is for laypersons.\(^ {167}\) If investigation nevertheless makes an initial judgment seem so questionable that alternatives must be considered, the perceiver will look for an alternative categorical generalization or stereotype in which to place the target.\(^ {168}\) Only if that effort at re-categorization fails will the perceiver attempt “piecemeal integration of the target’s attributes, with the goal of forming a coherent impression,” in other words, a more particularized judgment.\(^ {169}\)

Police errors can have longer-lasting consequences than a failed search or an unnecessary stop. The search and seizure error can set into motion a chain of events that leads to a wrongful conviction and sentence.\(^ {170}\) Data supporting this point is particularly rich where race is involved.\(^ {171}\) I have discussed this data in great detail elsewhere.\(^ {172}\) Here is a brief summary of the process: a person belonging to a racial minority may be irritated or angry about a stop, enhancing police suspicions, a point I noted briefly above.\(^ {173}\) These enhanced suspicions lead officers to tunnel vision, gathering enough confirming evidence to arrest while ignoring contradicting evidence.\(^ {174}\) Increased police suspicion leads to increasingly harsh investigation tactics, including flawed lineups and interrogation practices.\(^ {175}\) As a result, the suspect is wrongly fingered by a mistaken eyewitness, then, lacking hope for ready relief from the high-pressure tactics, confesses to a crime he did not commit.\(^ {176}\) This process is not fanciful. It is well documented and is the most plausible explanation for a significant number of wrongful convictions.\(^ {177}\)

In sum, though much of the time perceivers’ first impressions about targets’ behavior and personality are accurate, they also are often wrong. Yet these mistakes can convey cues prompting seemingly confirming behavior by targets,

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\(^ {167}\) See Maddox & Dukes, supra note 80, at 207–08 (describing this bias’s nature generally); infra text accompanying notes 170–83 (examining this bias’s operation for one type of professional: the police).

\(^ {168}\) Maddox & Dukes, supra note 80, at 207–08; see also Fiske et al., supra note 127, at 232–34 (noting that “certain social categories—such as gender, ethnicity, and age—are ‘privileged,’ in that they can be easily applied to most people one encounters”).

\(^ {169}\) Maddox & Dukes, supra note 80, at 207–08; see Harris & Garris, supra note 116, at 162.


\(^ {171}\) See generally Taslitz, supra note 27 (summarizing much of the data).

\(^ {172}\) See id.


\(^ {174}\) See id. at 130–31.

\(^ {175}\) See id. at 130–33; Taslitz, supra note 27, at 1091–92.

\(^ {176}\) See Taslitz, supra note 170, at 130–33; Taslitz, supra note 27, at 1091–92.

\(^ {177}\) See Taslitz, supra note 170, at 130–33; Taslitz, supra note 27, at 1091–99.
creating a self-fulfilling prophecy. Stereotype activation, especially based on race, can make the situation still worse. Perceivers ignore contradicting evidence, refrain from reconsidering initial judgments, and limit the scope of investigation undertaken. These flaws can be magnified by perceivers' lousy ability to detect deception. One author bemoaned the harm this process can cause in everyday life, much less in policing. Worried this author:

How many potentially excellent employees have gone unhired because they were, say, obese? How many graduate students have we turned down for our programs because they reminded us of a former student who dropped out after a year? How many of us have missed out on a lifelong, deeply rewarding romantic relationship because the person in question had the "wrong" color of hair or taste in music, or a laugh that was just a little bit too loud?

But, concludes this same author, "[p]erhaps the real tragedy of the behavioral consequences of first impressions is that we rarely discover when our impressions have led us awry." This observation is as true for police officers as for other persons: we simply have no practical way to tell whether police hunches in a particular case are right or wrong if we rely on hunches—the bare conclusions or feelings of the officer—alone.

D. A First Look at the Error-Reduction Advantages of an Individualized Suspicion Mandate

1. General Principles

There are thus good cognitive reasons to avoid deferring to officer hunches, instincts, and bare reliance on generalizations based on officer "experience," particularly in the context of first impressions. But if, as most commentators agree, a major purpose of the Fourth Amendment is indeed to limit officer discretion, then there is still more reason to reject such deference.

The individualized suspicion mandate is a sound alternative to deference and a useful way to reduce the risk of error. Much error stems from stereotypes and

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178 See supra text accompanying notes 116–25.  
179 See supra text accompanying notes 77–125, 134–42.  
180 See supra text accompanying notes 155–56.  
181 Harris & Garris, supra note 116, at 164–65.  
182 Id. at 165.  
183 See supra text accompanying notes 56–66.  
184 See Maclin, supra note 55, at 201 ("[T]he central meaning of the Fourth Amendment is distrust of police power and discretion.").
other generalizations. The individualization mandate specifically rejects mere generalization in favor of significant suspect-specific evidence of individual wrongdoing. Coming up with such individualized evidence—precisely because reliance cannot be placed solely on generalizations or prior experience—requires data gathering, more data thus being available to inform officer judgments. Data gathering likely requires corroborating and converging sources of evidence. Moreover, if judges and others are giving serious scrutiny to officer decisions, officers are more motivated not simply to find a suspect or make a “collar” confirming their gut instincts, but to get these decisions right.

Indeed, because the individualization mandate impliedly contains a mandate for officer explanation of his actions, the officer must anticipate objections to gaps in the evidence, thus seeking to fill them, perhaps even to explore alternative potential perpetrators. These reasons must be sufficient to persuade a judge that probable cause or reasonable suspicion exists. Officers must thus also be ready to address with specificity concerns that their sources are lying or mistaken.

Of course, the individualization mandate will not alone fix all the potential cognitive errors. But it will at least provide an incentive for training that further helps to do so. The more robust the individualized suspicion requirement, and the more it incorporates the insights of modern cognitive science, the greater the impetus for appropriate training, wherever feasible.

The importance of the officer explanation/justification aspect of individualized suspicion cannot be overemphasized. Because it is so difficult to know when an officer’s hunches alone are right, when wrong, her explanations become crucial to aiding a court, jury, or prosecutor in determining on which side of the right/wrong line a particular case falls. Moreover, significant social science suggests that the mere expectation of having to offer detailed, understandable explanations to an authority figure can reduce the influence of at least some cognitive biases relevant to forming first impressions.

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185 See Taslitz, supra note 13 (manuscript at 2–3 & n.5).
186 See id. (manuscript at 2–15).
187 See infra text accompanying notes 482–548 (discussing the duty to investigate).
188 See HENNING ET AL., supra note 1, at 52 (discussing the importance of various types of corroboration in the probable cause inquiry).
189 See supra text accompanying note 146.
190 See infra text accompanying notes 482–548.
191 See HENNING ET AL., supra note 1, at 39–40.
192 See id. at 50–57 (discussing informant credibility as an example).
193 See infra text accompanying notes 535–48 (explaining more fully why the individualized suspicion requirement creates incentives to investigate).
194 See TASLITZ ET AL., supra note 17, at 77, 240–43 (illustrating the sort of explanation required in search warrant affidavits).
195 See, e.g., Ford & Kruglanski, supra note 127, at 950 (telling subjects about to make first impressions that they must do so accurately because they will have to justify their conclusions to the
2. Don’t Blink!

Malcolm Gladwell, in *Blink*, the book that began this section’s discussion, implicitly recognizes both of these points as crucial, even outside the police context. Gladwell populates his book with anecdotes. He starts with an anecdote about the failure of the J. Paul Getty Museum in California to spot a purportedly sixth-century B.C. statue—for which it had paid an enormous sum of money—as a fake. Ultimately, they were proven right.

Gladwell tells the tale as an example of hunches outperforming deliberation. Yet he concedes that equally talented experts employed by the Getty had no such hunches. Why not? Gladwell argues that it was partly because they listened to “scientific data” rather than their gut, but mostly because they “desperately wanted the statue to be real,” precisely the kind of confirmation bias against which cognitive science cautions. Drawing on another theorist’s comments, Gladwell argues that a leading decision maker at the Getty simply “fell in love with [the] piece.”

But how does one choose between the Getty experts’ intuitions and those of outside experts? The Getty did not simply defer to the outsiders. Instead, when criticism mounted, it conducted further investigation. It was that additional investigation that allowed the Getty to articulate specific reasons justifying its change of mind. Those reasons included: (1) letters used to trace the statue’s origin were proven fakes by careful examination revealing that a postal code on a letter dated 1952 did not exist until twenty years later; (2) another letter referred to a bank account that was not opened until long after the letter’s date; (3) more careful examination revealed the statue to be a pastiche of styles from different

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196 GLADWELL, supra note 50, at 3–8.
197 See id. at 5–6.
198 See id. at 3–8.
199 Id. at 14–15.
200 Id. at 14.
201 Leslie C. Levin, *Bad Apples, Bad Lawyers or Bad Decisionmaking: Lessons from Psychology and from Lawyers in the Dock*, 22 GEO. J. LEGAL ETHICS 1549, 1566 (2009) (book review) (defining the confirmation bias as one “which causes individuals to pick out information that confirms or supports their tentative decisions and reject or downplay evidence that does not”). See supra text accompanying notes 138–39; infra text accompanying notes 293–94.
202 GLADWELL, supra note 50, at 15.
203 Id. at 6–7.
204 See id. at 52.
periods; and (4) more careful geologists concluded that the seemingly ancient marble could have been aged in a few months using potato mold.  

The possibility that reasons are post hoc explanations given to justify decisions made on other, subconscious grounds does not necessarily mean that those reasons are unpersuasive.  

Careful, thorough investigation combined with soundly articulated reasons focused on the particulars of a specific case is a sound basis for decision, regardless of what sparked those efforts.  

This observation is as true for police searches and seizures as it is for the Getty Museum or the myriad other decision makers making daily judgments in everyday life.

\[205\] See supra text accompanying notes 190-95; infra text accompanying notes 355-67, 454-72, 478-81.

\[206\] See supra text accompanying notes 190-95; infra text accompanying notes 355-67, 454-72, 478-81.

\[207\] See supra text accompanying notes 190-95; infra text accompanying notes 355-67, 454-72, 478-81.

\[208\] Psychologist Gerd Gigerenzer seemingly takes issue with this conclusion. See Gerd Gigerenzer, Gut Feelings: The Intelligence of the Unconscious 13-15 (2007). Gigerenzer offers an anecdote about a police officer who correctly guessed that a woman arriving at an airport was a drug courier yet who, when asked by Gigerenzer, was unable to explain what was unusual about the person he stopped. Id. at 14-15. Gigerenzer bemoans the American legal system’s distrust of these officer hunches and the system’s insistence that officers “articulate specific facts to justify a search, an interrogation, or an arrest.” Id. at 15. The courts’ “insistence on after-the-fact justification ignores,” Gigerenzer insists, the reality that “good expert judgment is generally of an intuitive nature.” Id. Gigerenzer sees this insistence as hypocritical, arguing that judges and prosecutors routinely rely on their inarticulate hunches in their own work. See id. Concludes Gigerenzer:

However, the issue should be neither hunches per se nor the ability to come up with reasons after the fact while hiding the unconscious nature of hunches. To avoid discrimination, the legal system instead needs to survey the quality of policemen’s hunches, that is, a detective’s actual success in spotting criminals. In other professions, successful experts are evaluated by their performance rather than by their ability to give post-hoc explanations for their performance. Chicken sexers, chess masters, professional baseball players, award-winning writers, and composers are typically unable to fully articulate how they do what they do. Many skills lack descriptive language. Id. at 15-16 (footnote omitted). Gigerenzer is right about one point: more research is needed into the relative degree of success and failure rates (this is not quite what he said, but, given his scientific background, I assume this is what he meant) of police in making probable cause and reasonable suspicion judgments, rather than relying primarily on cognitive science research involving other groups—though I have argued here that there is good reason to believe that such research is transferable.

But he is wrong in most of the rest of his argument. As the Getty Museum example shows, experts can learn to identify articulable bases for their hunches and to justify their actions in terms understandable to others. So long as the experts do not lie about what they observed or did, it is irrelevant whether the justifiable reasons they give are in fact their subjective reasons for action. What matters is that they can objectively, yet truthfully, justify their actions in ways that permit them to be subjected to scrutiny. Such scrutiny seems particularly important where, as with the police, the experts’ hunches are otherwise used to justify the state’s use of force against its citizens. The inherent violence of policing thus introduces a political element lacking, for example, when dealing with “chicken sexers.” Furthermore, Gigerenzer ignores the research suggesting that the mere knowledge that a person must justify his actions to others reduces the likelihood of error in forming his hunches in the first place. Gigerenzer also wrongly posits a dichotomy—inarticulate hunches versus articulate lies or mistakes—when unconscious hunches and conscious reasoning can in fact
III. Do Intuition, Experience, and Expertise Have Any Value?

A. Overview

To caution, as I have above, that police, like all people, are too often subject to inaccurate first impressions—impressions that may persist even after more extended contact with a suspect—does not necessarily mean, however, that intuitions are of no value. This subsection briefly summarizes some major benefits of intuition. The rest of Part III complicates the picture, adding further benefits and new problems while attempting to illustrate how combining intuition with conscious rational thought can maximize the benefits of both while minimizing their costs.

1. Rules vs. Intuition

One of the most obvious benefits of intuition arises when police must act quickly, particularly in ambiguous situations. In such cases, there are often few alternatives to relying on intuition. Training police in standard procedures to follow in some time-urgent cases is feasible if those situations are few and clear. But the number of situations where reasonable suspicion and probable cause judgments must be made is vast, and their character often ambiguous.

Even if rules could be designed for every such situation, the number of rules would be so unwieldy as to be useless in practice. Additionally, rules would work well together and form a continuum rather than a dichotomy, as Part III of this article will explain. Gigerenzer is also wrong about judges and prosecutors. Judges may start with a hunch, but they must and do routinely justify it on more objective grounds, a process that might even sometimes change their minds. See Richard A. Posner, How Judges Think 107–11 (2008). The same is true of prosecutors, as I can attest to from my own experience.

209 See Klein, supra note 5, at 10. As Klein puts it:

Complex domains aren’t as structured or stable as well-ordered ones. These situations may change rapidly and unexpectedly. We have to keep track of more factors, and they link to each other in lots of different ways. We may also have the feeling that we don’t know some of the important linkages. We aren’t entirely sure what causes events to happen. We can’t make good predictions about what will happen next. And we rely a lot on stories and examples instead of rules.

Id. at 15–16, 19–21 (noting that procedures embody current wisdom, shield against interruptions, act as reminders, and provide standards for evaluation, but they cannot anticipate the many unexpected real-world situations requiring judgment, ignore the importance of context, can become so lengthy and complex as to be incomprehensible, and quickly become outdated).

211 See, e.g., Taslitz et al., supra note 17, at 185–226 (collecting real-world cases and problems based on real-world situations, illustrating the diversity, ambiguity, and complexity of the probable cause and reasonable suspicion judgments); David A. Harris, Particularized Suspicion, Categorical Judgments: Supreme Court Rhetoric Versus Lower Court Reality Under Terry v. Ohio, 72 St. John’s L. Rev. 975 (1998) (analyzing illustrative case law).

212 See Klein, supra note 5, at 19–21.
become quickly outdated as new situations arose. It is particularly difficult to rely on the categorization process embodied in rules in areas like reasonable suspicion and probable cause, where the law mandates individualized treatment of every situation as if in some sense unique. Excessive reliance on rules can also make police unmotivated and intellectually dull. Furthermore, it is difficult to design rules on how to resolve ambiguous circumstances. Judgment is unavoidable.

This observation does not mean, on the other hand, that rules are irrelevant to policing. To the contrary, even in the area of searches and seizures, rules can be designed for a relatively small number of commonly recurring situations. Rules work best when they are treated as guidelines—subject to departure for good reason—rather than as rigid mandates. More flexible guidelines structuring the process by which officers exercise their intuition and provide safeguards against intuitive error can also be designed, a point to be explained more fully below. Intuition itself can be molded and educated by improved training procedures and better “inputs” offered to inform intuition’s exercise. Intuitions thus work best in the world of search and seizure when they are combined with more conscious, systematic thinking embodied in rules, guidelines, justification requirements, and accountability systems.

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213 Id. at 21.
214 See Taslitz, supra note 13 (articulating an extended defense of this argument).
215 See KLEIN, supra note 5, at 23–24.
216 See id. at 10. Indeed, rules can sometimes so foster inefficiency that those subject to them look for ways to work around them, often distrusting them as obsolete or counterproductive. Id. at 21.
217 See id. at 28 (“In complex situations, people will need judgment skills to follow procedures effectively and to go beyond them when necessary.”) (emphasis omitted).
218 See, e.g., TASNITZ ET AL., supra note 17, at 304–05, 311–13 (summarizing common police department rules on the use of deadly force); SAMUEL WALKER, THE NEW WORLD OF POLICE ACCOUNTABILITY 49–62 (2005) (discussing model police department rules governing “critical incidents,” such as use of force, high-speed vehicle pursuits, handling violent mentally-disordered persons, foot pursuits, use of police canines, and display of weapons).
219 See KLEIN, supra note 5, at 28; WALKER, supra note 218, at 46–47 (noting that discretion can never be eliminated in policing).
220 See WALKER, supra note 218, at 46–49 (describing the potential functions of well-designed police department rules as confining discretion (e.g., permitting deadly force only in defense of life), structuring it (specifying, via guidelines, the factors officers should consider in making decisions), checking it (via review), promoting accountability that clarifies department priorities, and providing training tools).
221 See KLEIN, supra note 5, at 31 (training people in procedures by having them work through scenarios to learn when to follow procedures and when and how to depart from them also helps trainees “acquire some of the tacit knowledge they need in order to apply procedures effectively”).
222 See supra Part I; infra text accompanying notes 346–48.
2. When to Investigate? Pattern Matching and Anomaly Spotting

Intuition can likewise aid in rapid pattern matching, allowing police to spot far more patterns than could ever be embodied in rules and to see new patterns emerge over time. Expertise—partly consisting of trained intuition—can help officers see relevant facts and their interrelationships in ways that would be invisible to the novice. As one commentator explains, "We [laypersons] rely on tacit knowledge to interpret facts, to judge their credibility, to fit them together, and to judge what counts as a relevant fact in the first place." Police do the same thing.

The flip side of pattern matching is anomaly spotting. Whatever does not fit a pattern is viewed as anomalous, requiring further investigation to explain the incongruity. To the police, one former officer explains, "incongruity is a fancy word that means you look out of place, like you don't belong somewhere." That officers sense that a person does not belong may stem from, in the dictionary sense of the word, a true anomaly—an observation not readily explained by prior experience—or may instead stem from fitting a perceived familiar pattern, but a pattern that officers associate with being "up to no good." Either way, "[c]ops are incredibly attuned to incongruity." Without pattern matching and anomaly spotting, officers would have little to guide them concerning when, where, how, and why to investigate in time-urgent, ambiguous situations. Nor would officers

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223 See KLEIN, supra note 5, at 41–43.
224 See id. at 36 ("With experience we learn to see things that others don’t notice."); id. at 37 ("With experience we learn where to look as well as how to make discriminations and recognize connections.").
225 Id. at 34.
226 See id. at 43 ("We draw on dozens and hundreds of experiences to sense when something seems familiar, or to pick up anomalies.").
227 See id. at 44 (noting that the “interplay between noticing typical cases and anomalous ones is a type of tacit knowledge found in many fields,” including nursing, where nurses’ ability to spot anomalies makes them “early warning systems to catch weak signals that a patient is starting to deteriorate,” and weather forecasters, who choose what regions to watch most carefully for further developments based upon anomaly spotting).
228 CARSON & DENHAM, supra note 26, at 147.
229 See MICROSOFT ENCYCLOPEDIA COLLEGE DICTIONARY 54 (2001) (defining an “anomaly” as “something that deviates from the norm or from expectations,” a “peculiarity,” or “something strange and difficult to identify or classify”) (emphasis omitted).
230 See, e.g., Taslitz, supra note 105, at 2293–2302 (discussing police interpretation of “flight”).
231 CARSON & DENHAM, supra note 26, at 152.
232 Cf. id. at 152 (“[I]ncongruous” situations to an officer include a beat-up car slowly cruising a wealthy neighborhood; a man in a tuxedo strolling ship-free docks at midnight; dogs howling uncontrollably; yells paired with doors slamming; an expensive limousine cruising the barrio; and an evening-gown-clad woman walking a dirt road alone, none of which are “illegal, just unusual. They make curious cops want to stop the people involved and find out more.”).
have "Aha moments" that can send investigations into new, more productive directions. But, once again, biases, poor data, and defective training can turn necessary tools of law enforcement into error-generating machines.

3. Sense Making Through Storytelling

Knowing when and where to investigate are, however, insufficient guides to action. An officer must be able to make sense of the data she has collected. Officers, like all people, make sense of the world through mental models—"the stories we construct to understand how things work." Sensible stories require a full sense of the context in which events occur. Intuition at its best thus aids officers in paying attention to that context. Story generation is not necessarily a "final stage" in sense making. Rather, each of the processes noted here—pattern matching, anomaly spotting, data gathering—may be guided by tentative stories and will help in revising and fleshing out later stories. Store detectives, for example, monitor shopper behavior for patterns suggesting shoplifting. They do

233 See Mark Fuhrman, The Murder Business: How the Media Turns Crime into Entertainment and Subverts Justice 1–21, 45 (2009). The author, a former detective now working in the media, began his own investigation of the infamous Caylee Anthony child murder case and then of the Stacy Peterson case until "[l]ittle by little, the details and minutiae added up." Id. at 45. "They pressured law enforcement in Will County to ... do a real investigation on Drew Peterson [as a suspect]." Id.

234 See supra text accompanying notes 50–160; infra text accompanying notes 255–317.


237 See Klein, supra note 5, at 36, 44–45; Taslitz, supra note 235, at 410–19 (discussing "epistemological filters" that screen some aspects of the world from our perceptions while heightening our attention to other aspects).

238 See Klein, supra note 5, at 36, 44–46 (explaining the story generation process). Conscious and subconscious processes thus interact in the story creation and revision process. Gary Klein, a senior scientist at Applied Research, makes an analogous point:

Further, these different aspects [of tacit knowledge] can include conscious thinking. When we perform workarounds, when we use our mental models, we are usually deliberating about the tasks at hand. Tacit knowledge is critical for these activities but we are also thinking critically, relying on our memory, consciously imagining how things might play out, and so forth.

Id. at 36.

239 See id. at 41–42.
so, however, by “trying to see if your movements fit into a sensible story of a person trying to figure out which product to buy, or if they are the disconnected actions of a shoplifter attempting to create confusion.”240 When the detective is satisfied that enough parts of a convincing story are in place, the detective acts, confronting the shopper in an effort to confirm or refute the story the detective has crafted.241

Many stories are rooted in stock cultural tales that may or may not accurately reflect social reality.242 Each individual’s life experience also affects the stories she crafts, though those stories may be inapposite in judging the actions of another person with a radically different life experience.243 Impoverished or skewed sets of narratives can thus also lead to error. The trick is to help police build richer narrative mental models.244

4. Satisficing

The law prohibits stopping suspects based on mere “hunches.”245 But those hunches, initially based partly on complex, rapid, and subconscious processes,246 are necessary to effective police investigation.247 Hunches can help police generate new ideas, spot otherwise “invisible” evidence, and nip crime in the bud before harm occurs.248 In an ever-changing, ambiguous world, police perfection cannot be achieved, nor does the law require it.249 Instead, police “satisfice”—they

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240 Id. at 42.
241 See id. at 41–42.
243 See id. at 410–19, 434–39.
244 There can be a critical conscious, articulated component to training police in richer mental models. As Klein again put it: “A number of studies have shown that procedures help people handle typical tasks, but people do best in novel situations when they understand the system they need to control. People taught to understand the system develop richer mental models than people taught to follow procedures.” KLEIN, supra note 5, at 23 (footnote omitted).
245 Terry v. Ohio, 392 U.S. 1, 22 (1968).
246 See GIGERENZER, supra note 208, at 13–19 (discussing police hunches and hunches more generally). Gigerenzer defines a “hunch” as a “judgment . . . that appears quickly in consciousness . . . whose underlying reasons we are not fully aware of, and . . . is strong enough to act upon.” Id. at 16. He equates “hunches” with “gut feeling[s]” or “intuition[s].” Id.
247 See id. at 13–19 (defending this point, though, in my view, Gigerenzer takes it too far in connection with policing); supra note 208 and accompanying text (criticizing aspects of Gigerenzer’s view of police hunches).
248 See Terry, 392 U.S. at 24–28 (recognizing crime-control benefits of police being able to stop crime before harm occurs, but still requiring reasonable suspicion that criminal activity is afoot to justify stopping someone as essential to constraining police officer discretion); KLEIN, supra note 5, at 18–47 (summarizing the benefits of intuitions or hunches).
249 See Terry, 392 U.S. at 24–28, 30–31 (requiring mere “reasonable suspicion” to stop someone); TASLITZ ET AL., supra note 17, at 348–49 (defining reasonable suspicion’s quantitative
try to get "good enough" results in an environment in which information and analysis of it are costly. Doing good enough turns on crafting plausible stories. Such stories may have their roots in the subconscious, but they can be explained to third parties. Intuition is, therefore, essential to good police work, but analysis to rectify intuition's pathologies is necessary too. The sections that follow thus elaborate on those pathologies and their potential cures in an effort to minimize police error without hamstringing the police in doing their job of enforcing the law.

B. Minimizing the Costs and Maximizing the Benefits of Intuition

1. Heuristics

   i. The Fundamental Attribution Error Redux

   Sole reliance on intuition gives heuristics—cognitive shortcuts—free play. We discussed one such heuristic, the fundamental attribution error, above in component as significantly below a preponderance of the evidence, meaning that police can still legally stop someone who is more likely innocent than guilty).  

   250 HERBERT A. SIMON, MODELS OF MAN, SOCIAL AND RATIONAL: MATHEMATICAL ESSAYS ON RATIONAL HUMAN BEHAVIOR IN A SOCIAL SETTING 204-05 (1957) (coining the term "satisficing" and defining it); see KLEIN, supra note 5, at 87 (noting that satisficing is a common strategy for laypersons and experts).

   251 See KLEIN, supra note 5, at 91 ("[A]ction scripts are hunches for how to decide.").

   252 See id. at 36 (explaining how good decision making that draws on tacit knowledge always has a more conscious, articulable component). Klein, of course, acknowledges that it may take "special talent to describe tacit knowledge because people have difficulty articulating it." Id. at 42. But Klein next describes a technique known as "cognitive task analysis," id., based on the work of Carnegie Mellon University psychology professor James Staszewski on how to train experts in the articulation of tacit knowledge. See James J. Staszewski, Cognitive Engineering Based on Expert Skill: Notes on Success and Surprises, in NATURALISTIC DECISION MAKING AND MACROCOGNITION 317 (Jan Maarten Schraagen et al. eds., 2008). For example, Staszewski identified a few experts on landmine detection, including Floyd Rockwell. Rockwell had trouble explaining his phenomenal success, so Staszewski "watched him in action, prompting him to think aloud as much as possible." KLEIN, supra note 5, at 43. From this cognitive task analytical procedure, Staszewski was able to identify Rockwell's "secrets" and impart them to other Army engineers, including via training drills to make the principles real. Id. The result: the Army's newly trained personnel raised their mine-detection rate from a maximum of 20% to over 90% and Rockwell could now readily articulate his own "secrets." Id.

   253 See GIGERENZER, supra note 208, at 13-19.

   254 See supra notes 184-208 and accompanying text; infra text accompanying notes 318-420.

   255 See GIGERENZER, supra note 208, at 18 (equating the "colloquial rule of thumb" with the "scientific term heuristic," and describing heuristics as taking advantage of evolved capacities of the brain in explaining how intuition works). A heuristic "is quite different from a balance sheet with pros and cons; it tries to hit at the most important information and ignores the rest." Id.
analyzing the causes of flawed first impressions. That heuristic prods persons, particularly those raised in Western culture, to attribute others’ behavior more to their personalities than to their situations. Moreover, observers are willing to make dispositional (character-based) judgments on little information. Additionally, the “devil’s horn” effect leads observers, like police, to generalize one bad trait, treating the entirety of the observed individual’s character as tainted. Such judgments can infect police decision making, leading them to believe that certain individuals about whom they know relatively little are guilty of something. The officers’ job becomes discovering what that something is and how each individual is hiding it. The result can make an officer too willing to believe untrustworthy snitch reports and to use overly aggressive interrogation or other investigative techniques that may ensnare the innocent. This combination of factors can lead to tunnel vision, in which police too quickly focus on a single suspect, readily excluding others as even potential alternative perpetrators.

As noted above, facial characteristics can amplify the fundamental attribution error’s impact on police. “His face doesn’t fit” or “I didn’t like the look of him” are scientifically unsupportable indicators of guilt. Yet police make these sorts of judgments often, further perpetuating stereotypes.

The anchoring-and-adjustment heuristic may also influence police judgments. This heuristic adjusts a plausible answer to a problem by hovering around an initial judgment or impression known as the “anchor.” Thus, if you ask subjects whether Mahatma Gandhi was over or under 140 years of age at the time of his assassination (the “prime question”), then ask them to guess what Gandhi’s precise age was upon his death, the second question will elicit considerably higher answers that...
than if the prime question had suggested a much lower starting place. Police primed with anchors—for example, overestimating the crime rate in a neighborhood, the relative dangerousness of persons of certain races, or the criminal reputation of an individual—may be more suspicious than a more balanced weighing of the evidence warrants.

ii. Framing

The framing heuristic can likewise bias judgments. How a problem is framed can alter its answer. For example, experimental subjects were given descriptions of parents A and B, each description containing equal numbers and intensity of good and bad parenting characteristics. The experimenters instructed the subjects to sit as a jury in a custody hearing. When asked whether to "award" B custody over A, most subjects chose B because of B's positive parenting qualities. But when asked whether to "deny" B custody, subjects instead focused on B's negative parenting qualities, accordingly choosing A. Local police culture, or individual officers' styles or the management styles of their superiors, may play a role here. An officer asked to "get this scumbag," for example, may be primed to focus only on indicators of the "scumbag's" guilt. An officer asked in a more dispassionate manner to pursue leads combined with a more open-minded local law enforcement culture might see more of the evidence.

267 See Fritz Strack & Thomas Mussweiler, Explaining the Enigmatic Anchoring Effect: Mechanisms of Selective Accessibility, 73 J. PERSONALITY & SOC. PSYCHOLO. 437, 437–43 (1997) (using the Mahatma Gandhi and other tests of this heuristic); KLEIN, supra note 5, at 49–50 (summarizing the Strack and Mussweiler study).

268 See CARSON & DENHAM, supra note 26, at 155–56 (discussing police ideas about alleged "high-crime" neighborhoods); PETER K. B. ST. JEAN, POCKETS OF CRIME: BROKEN WINDOWS, COLLECTIVE EFFICACY, AND THE CRIMINAL POINT OF VIEW (2007) (offering an extended explanation of why police conceptions of entire neighborhoods as "high crime" are often wrong); Taslitz, supra note 27, at 1097–1106 (discussing flawed police perceptions of racial dangerousness and the roles of gossip and reputation in fostering police suspicion).

269 See KLEIN, supra note 5, at 51–52 (illustrating the framing heuristic); MAUBOUSSIN, supra note 262, at 62–64 (explaining that how choices are framed affects decisions and illustrating the point).

270 See MAUBOUSSIN, supra note 262, at 62–64.

271 The experiment summarized here is from Eldar Shafir, Choosing Versus Rejecting: Why Some Options Are Both Better and Worse Than Others, 21 MEMORY & COGNITION 546, 549 (1993).

272 Id.

273 Id.

274 See KLEIN, supra note 5, at 51–53 (concisely summarizing this and other studies).


276 The "scumbag" reference is one that I have heard repeatedly on numerous television shows and in movies about the police and aptly captures the sort of cultural attitude of some police departments.
on both sides of the question of whether a specific individual committed a particular crime.\textsuperscript{277}

\section*{iii. The Representativeness Heuristic}

Another common heuristic that may be at work in policing is the "representativeness heuristic."\textsuperscript{278} This shortcut judges persons based on salient qualities seen as making them representative of a group rather than based on logic.\textsuperscript{279} Professors Tversky and Kahneman\textsuperscript{280} famously asked subjects which of the following two conclusions was more probable:

1. Linda is a bank teller
2. Linda is a bank teller and is active in the feminist movement.\textsuperscript{281}

Before making their decisions, the subjects were told that Linda majored in philosophy, was deeply concerned with discrimination and social justice as a college student, including participating in antinuclear demonstrations, and was now thirty-one years old.\textsuperscript{282} Most subjects chose the second statement—that Linda was a feminist bank teller—as more probable than the first one, which simply declared that she was a bank teller.\textsuperscript{283} Yet that judgment is flawed because there are surely more bank tellers than feminist ones. Even if all bank tellers were feminists, a highly unlikely situation, it would not be more probable that Linda was a feminist bank teller than a bank teller.\textsuperscript{284} Police are equally likely to view, for

\textsuperscript{277} See HARRIS, supra note 275, at 84–85, 133–34, 155–71 (explaining the importance of local police culture); infra text accompanying notes 324–45 (promoting open-mindedness).

\textsuperscript{278} MAUBOUSSIN, supra note 262, at 22.

\textsuperscript{279} See KLEIN, supra note 5, at 53.

\textsuperscript{280} See Amos Tversky & Daniel Kahneman, Judgments of and by Representativeness, in JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel Kahneman et al. eds., 1982).

\textsuperscript{281} KLEIN, supra note 5, at 53 (summarizing this experiment).

\textsuperscript{282} Id.

\textsuperscript{283} Id.

\textsuperscript{284} See id. Gerd Gigerenzer challenges this interpretation of the Tversky-Kahneman bank teller experiment. Gigerenzer reasoned that conversational participants assume that their partner has given them relevant information, so they interpret the ambiguous word "probable" in the original experiment simply to mean "plausible." GIGERENZER, supra note 208, at 95. Accordingly, Gigerenzer did his own experiment using the same descriptions of Linda the bank teller, but telling participants that there are a hundred persons fitting Linda's description and asking "how many" of them are bank tellers and "how many" bank tellers are active in the feminist movement. Id. at 96–97. This time the apparent logical fallacy of treating a subset (feminist bank tellers) as occurring more frequently than the full set (bank tellers) disappeared. Id. But Gigerenzer's experiment is irrelevant for my purposes here, which is to discuss cognitive dangers in ambiguous situations (Gigerenzer eliminated the ambiguity). In any event, Gigerenzer and colleagues themselves conducted another experiment interpreted by other analysts as showing the representativeness heuristic at work and leading to other logical errors. See Gerd Gigerenzer et al., AIDS Counselling for Low-Risk Clients, 10 AIDS CARE 197 (1998); KLEIN, supra note 5, at 53–54 (interpreting Gigerenzer and colleagues' study). AIDS tests used at the time were good at detecting HIV (the virus causing AIDS) but had high false positive rates. Id. Gigerenzer and his team sent a low-risk male client for HIV testing at
example, a young male dressed in scruffy clothes with unkempt hair as “representative” of a group—hoods defiant of social honesty norms—without inquiring into “base rates” (the number of unkempt, scruffy young males who commit crime versus those who do not).285

iv. The Availability Heuristic

Police may also fall victim to the “availability heuristic,” judging an event’s probability based on what images or data are most readily available in an individual’s memory.286 The recency or emotional vividness of an experience might make it easily accessible to memory, an accessibility thoroughly independent of the event’s frequency.287 Thus, an officer recently involved in gunfire with an African-American male youth gang might, the next day, overestimate the likely dangerousness of other young men similar in appearance because of the vivid, recent memory of the shootout.288

v. Flawed Extrapolation from the Past

Police may also suffer from inappropriately extrapolating from past results when they have insufficient information to identify a trend or an important factual distinction.289 This unwarranted tendency to extrapolate may explain the conflicting nature of so many police profiles. For example, one profile might identify speeding as suspicious, while another might identify rigid adherence to speed limits as a cause for concern.290 Courts too rarely inquire into the bases for

twenty German public health centers. Id. at 54. Fifteen of the twenty trained counselors told the patient that a positive test result would almost definitely mean that he had HIV when, in fact, low-risk men testing positive had only a fifty percent chance of being infected. Id. Apparently, knowing that the HIV-infected patients almost always test positive and finding probability data confusing, the counselors relied on the HIV-infected as a class as most representative of the meaning of the positive test. Id.

285 See CARSON & DENHAM, supra note 26, at 153–54.

286 MAUBOUSSIN, supra note 262, at 22 (defining this heuristic).

287 See id. at 23 (“We tend to give too much weight to the probability of something if we have seen it recently or if it is vivid in our mind.”). This heuristic, like the representativeness one, “encourages us to ignore alternatives.” Id.

288 This example is mine. See also CYNTHIA LEE, MURDER AND THE REASONABLE MAN: PASSION AND FEAR IN THE CRIMINAL COURTROOM 11, 13, 62, 175–99 (2003) (exploring racial bias and police use of deadly force).

289 See MAUBOUSSIN, supra note 262, at 24; see also JASON ZWEIG, YOUR MONEY AND YOUR BRAIN: HOW THE NEW SCIENCE OF NEUROECONOMICS CAN HELP MAKE YOU RICH 69–71 (2007) (describing a Duke University experiment in which subjects were shown what they were told would be random patterns of circles and squares, yet, after seeing only two symbols in a row come up the same, subjects automatically expected the third symbol to do so, finding a “trend” in but two identical symbol occurrences).

290 See TASLITZ ET AL., supra note 17, at 354–56.
profiles, and many may stem from individual officer or policing unit experience. The problem may be worsened—both in creating the profile and in applying it to particular cases—by the "confirmation" and "hindsight" biases. The confirmation bias is the tendency to seek information confirming a prior belief while disregarding or minimizing disconfirming evidence. The hindsight bias is the tendency to remember things in hindsight as if they were known at the moment of decision. Thus, a search uncovering contraband may be remembered in a way creating more confidence in finding such contraband at the time the officer decided to search than was in fact the case. That success may be remembered as confirming certain individual behaviors as indicative of guilt while many failed searches under similar circumstances are forgotten or minimized.

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292 See HARRIS, supra note 31, at 84–90; cf. Scott A. Huettel et al., Perceiving Patterns in Random Series: Dynamic Processing of Sequence in Prefrontal Cortex, 5 NATURE NEUROSCIENCE 485, 485–90 (2002) (arguing that evolution fostered a deep-seated desire to find patterns to aid in predictions, patterns that may often have matched reality in the world in which the desire evolved, but that may do so far less often in our modern, technological world).

293 See MAUBOUSSIN, supra note 262, at 27, 35.

294 Id. at 27.

295 Id. at 35 ("We humans have an odd tendency: once an event has passed, we believe we knew more about the outcome beforehand than we really did.").

296 Cf. TASLITZ ET AL., supra note 17, at 236 (discussing effect of hindsight bias on judges making the probable cause determination, thus making it preferable for judges to make that determination in advance, before they know whether what they seek will be found, as occurs with warrant—as opposed to warrantless—searches); Slobogin, supra note 128, at 376 n.41 (explaining "hindsight bias" and summarizing the empirical evidence in support of it).

297 Another bias that might be at work is the self-justification bias, that is, our great need to rationalize our decisions. See MAUBOUSSIN, supra note 262, at 25. The need arises from our discomfort with "cognitive dissonance," a person holding "two cognitions (ideas, attitudes, beliefs, opinions) that are psychologically inconsistent." CAROL TAVIS & ÉLLOI ARONSON, MISTAKES WERE MADE (BUT NOT BY ME): WHY WE JUSTIFY FOOLISH BELIEFS, BAD DECISIONS, AND HURTFUL ACTS 13 (2007). Thus an officer who believes he has a special ability to spot crime because of his training and seeks to help the local community, believing himself to harbor no racial hatred, might face cognitive dissonance if confronted with evidence that a profile he relies upon has an unjustified disparate racial impact and a high error rate. To resolve this dissonance, he must contrive arguments dismissing the disparity's existence, justifying it, or ignoring or crafting arguments to reject evidence of the high error rate. This seems to me one plausible way to explain why so many police can trust profiles that are both internally inconsistent and inconsistent with others used by equally confident additional officers or departments.
vi. Do Heuristics Play a Pernicious Role in the "Real World" of Policing?

There is a conflict among researchers over how powerful a role heuristics play in the "real," as opposed to experimental, world and whether that role is desirable. Critics emphasize that heuristics arose because they worked often enough to be evolutionarily advantageous. Critics also cite studies showing a diminished or evaporated impact of certain heuristics in the reasoning of at least some experts in their daily practice.

However, there are several reasons to believe that heuristics play a powerful—and potentially pernicious—role in policing. First, stress tends to magnify heuristics' power, and police officers confronting suspects are in just such stressful situations. Stress also clips individuals' ability to think long-term, narrowing their vision. Second, many officers crave excitement, attracting them to stressful circumstances, even sometimes prodding them to create stressful situations. Third, the pseudo-militaristic culture of many police departments and units encourages a "them/us" dichotomous style of thinking. "They" are the bad (dishonest, dangerous) guys, and "we" are the good guys. That sort of thinking frequently activates resorting to stereotyping, sometimes of the crudest sort, even in the face of stereotype-contradicting evidence. Fourth, police often work in racial minority communities. There is ample evidence that many police at least subconsciously buy into dark skin color or other phenotypical features associated with racial minority status as indicators of dangerousness. Fifth, the most careful critics of the experimental heuristics research concede that heuristics likely

298 See KLEIN, supra note 5, at 55.
299 See id. at 56–57 (discussing some of the cognitive advantages of heuristics); GIGERENZER, supra note 208, at 54–69 (explaining the evolutionary roots of heuristics).
300 KLEIN, supra note 5, at 59.
301 See MAUBOUSSIN, supra note 262, at 29–30.
302 Id.
303 See CARSON & DENHAM, supra note 26, at 2.
305 See Taslitz, supra note 304.
308 See Taslitz, supra note 170, at 124–33.
play some role in the exercise of professional expertise, and it is important to limit that role to a beneficent one.\textsuperscript{309}

Finally, police seem to craft their own cognitive shortcuts or engage in a semi-conscious or fully conscious analogous process of shortcut creation. As one former officer reports, “high-crime areas” for police include streets, cars, concerts, parks, and playgrounds, and “mid-crime areas” include schools, stores, and airports.\textsuperscript{310} Police view individual behavior in high-crime areas in a more suspicious light,\textsuperscript{311} a judgment that the United States Supreme Court validates, generally with little serious inquiry into the legitimacy of the “high[-]crime” label.\textsuperscript{312} Yet the breadth of these locations gives police enormous discretion.\textsuperscript{313} Police also label as high-crime areas other locations with which most persons would intuitively agree: housing projects, “gang” neighborhoods, and gambling joints.\textsuperscript{314} Yet empirical research suggests, at least as to entire neighborhoods, that police officers’ intuitive judgments may be wrong.\textsuperscript{315} Most of the “high crime” in neighborhoods is in fact limited to certain blocks.\textsuperscript{316} In addition, the precise location of these blocks can be identified and predicted with more effective police data-gathering techniques and often boiled down to a few markers making worrisome locations readily identifiable.\textsuperscript{317}

\section*{vii. Reducing Heuristics’ Negative Impact}

\subsection*{a. Improved Information and Training}

Several sorts of techniques can help to reduce the negative impacts of heuristics and their more conscious shortcut cousins, profiles and high-crime-area stereotypes. Computerized data gathering and other enhanced data collection and analysis techniques can substitute more accurate anchors (the true rate of criminality in a location, for example) and frames for less accurate ones.\textsuperscript{318} Such

\begin{footnotesize}
\begin{enumerate}
\item See \textit{KLEIN}, supra note 5, at 61–66.
\item \textit{CARSON} \& \textit{DENHAM}, supra note 26, at 156.
\item See id.
\item See Margaret Raymond, \textit{Down on the Corner, Out in the Street: Considering the Character of the Neighborhood in Evaluating Reasonable Suspicion}, 60 \textit{OHIO ST. L.J.} 99 (1999).
\item See \textit{CARSON} \& \textit{DENHAM}, supra note 26, at 156.
\item See \textit{ST. JEAN}, supra note 268.
\item See \textit{id.}, at 5, 22–24, 217–18.
\item See \textit{id.}, at 5, 22–24, 211, 217–18.
\item See generally \textit{WALKER}, supra note 218, at 100–34 (discussing “early intervention” programs improving individual police officer performance, data collection strategies to inform those programs, and their similarity to \textit{COMPSTAT}, a computer-based effort to systematically collect data on crime and disorder in a search for patterns to guide ongoing changes in police strategy and tactics); \textit{JAMES J. WILLIS ET AL., THE POLICE FOUNDATION, COMPSTAT AND ORGANIZATIONAL CHANGE}}
\end{enumerate}
\end{footnotesize}
data can help to make a police officer aware of base rates and help her to second-guess her "gut" without ignoring it. Better information on which heuristics can operate is an important strategy because merely pointing out the influence of heuristics and their dangers alone does little to alleviate them. Experts tend to resist such debiasing efforts because they are skeptical of the relevance of lab results to the real world, the uncertainty and ambiguity of expert practice make chance seem to be a bigger contributor to error than bias, and they have little confidence that "egghead"-suggested debiasing techniques will help.

Moreover, the police, like many professionals, are likely over time to see categories of cases rather than unique individuals or situations. They prefer the security of what they know: the comfort of stereotypes and shortcuts in an otherwise frightening and incomprehensible world. As one commentator put it, "[p]rofiling by stereotype ignores a person's individuality, but so what? Cops decide whether to pull over a car or stop someone on the street in a split second. When cops stop you, [they are] not trying to imbibe the wondrous fullness of your being."

Improved information and training practices might also help police to adopt the "outside view." Rather than relying solely on police intuition regarding what patterns exist and what suspect behavior reveals (the "inside view"), they can look at the results of an objective examination of data to see what patterns it will in fact


319 See Klein, supra note 5, at 61 (noting that poor data produces inaccurate results, regardless of the reasoning strategy); id. at 62 (recommending building more accurate anchors, frames, and mental models rather than trying to replace these heuristics altogether); id. at 64 (noting that awareness of base rates helps to improve estimates, even among children).

320 See id. at 120–21 (focusing on algorithms or other methods to debias by replacing partly intuitive reasoning strategies with more automated ones). However, "we aren't comfortable with letting decision analysts or techniques usurp our decision authority." Id. at 121. "We are responsible for the outcomes, not the analyst or the method." Id. Professor Raanan Lipshitz of Haifa University was quoted as saying, "Low to high ranking executives have consistently stated that they had no use for the formal models to which they had been exposed in a variety of university and executive development courses." Id. See J. Frank Yates et al., Hard Decisions, Bad Decisions: On Decision Quality and Decision Aiding, in EMERGING PERSPECTIVES ON JUDGMENT AND DECISION RESEARCH 13, 34 (Sandra L. Schneider & James Shanteau eds., 2003) ("[W]e have seen little evidence that debiasing techniques are frequently employed in actual practice.").

321 See Taslitz, supra note 13 (manuscript at 1–2) (summarizing the need for an enhanced individualized suspicion requirement to govern police); Taslitz, supra note 36, at 14–24 (explaining many of the institutional and psychological forces that move criminal justice decision makers toward de-individualized justice).

322 See Taslitz, supra note 36, at 14–24.

323 Carson & Denham, supra note 26, at 117.

reveal (the "outside view"). Repeated, vivid presentation of such data, combined with guidelines on its use and a proper reward structure for relying on that data, can help to change behavior. Vigorous efforts of this sort are required because three illusions build resistance to persons adopting the outside view: overconfidence, optimism, and control.

Most people are overly confident in their abilities. Thus most persons consider themselves "above average" drivers or leaders when that cannot mathematically be true. Even when acknowledging evidence of their shortcomings, most people tend to dismiss them as inconsequential in undermining their overall high opinion of their skills. Yet, perhaps paradoxically, the poorest performers at a task tend to most dramatically overstate their abilities.

Most people are also optimists, seeing their future as likely brighter than that of others, and most of us behave as if we can control chance events, such as winning the lottery. As cognitive psychologist Daniel Gilbert notes, most people think of themselves as different from and better than others.

Additionally, people's natural tendency is to base decisions on accumulated anecdotes rather than evidence. But anecdotes contribute to the inside rather than the outside view.
None of these cognitive habits imprison persons within the inside view. However, they do require persistence and energy to achieve a cognitive jailbreak.

Another cognitive psychologist, Keith Stanovich, argues that intelligent people's cognitive performance can be improved by telling them in advance how to reason. Stanovich recommends three corrective steps: (1) teach people common cognitive errors; (2) promote "situational awareness," recognition of the problem in the context in which it arises; and (3) teach them a mental tool set to keep inappropriate intuitions in check. This combination must be designed to explode false beliefs, calibrate judgments with the evidence, encourage honest introspection, and promote mental flexibility.

I would add several points. Notably, significant research suggests that persons will do better at overcoming biases if they are not simply made aware of them, but also offered explanations of why persons often resist abandoning them. Furthermore, even when the subconscious is inaccessible to conscious thought, changing conscious behavior can, over time, alter the unconscious. Training must thus go beyond providing police with new information to role-playing and stricter monitoring of field behavior, where feasible. Additionally, some cognitions, particularly certain emotional ones, are more easily accessible to the conscious mind with proper training.

Furthermore, because mental models—stories—play such an important role in human judgment, police departments must work to enrich those models.

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335 See MAUBOUSSIN, supra note 262, at 3–13.
336 Speaking of the influence of heuristics more generally, Gary Klein, a thinker who argues that laboratory research often overstates systematic errors caused by heuristics, that jettisoning heuristics entirely can have unintended ill consequences, that too much of the biases research involves novices and ignores context, and that heuristics are often useful in everyday life, concedes that in practice they also sometimes lead to "severe and systematic errors." KLEIN, supra note 5, at 56. Yet Klein also argues that many of the strategies discussed above can correct for heuristics' baleful influences and that the goal of research and reform should be to improve the quality of tacit judgment rather than to displace it entirely. See id. at 62–66, 121.
337 See STANOVICH, supra note 326, at 99–100.
338 See id. at 99–100, 124, 128, 150–51, 167–79, 199–208, 211–12; MAUBOUSSIN, supra note 262, at xv–xvii (discussing corrective lessons to be learned from Stanovich and his intellectual cousins).
339 See MAUBOUSSIN, supra note 262, at xv–xvii (making similar points, albeit using slightly different language).
341 See Taslitz, supra note 12, at 177–78.
342 Cf. id.
343 See id. at 176–78. Emotions turn on cognitions. For example, someone fears a snake only by first indentifying an object as a snake, then concluding that snakes are dangerous. See Taslitz, supra note 110, at 442–43.
344 See KLEIN, supra note 5, at 62 (noting importance of improving experts' performance by giving them richer mental models).
Training, daily police culture, enhanced community interaction, empathy exercises, and a proper reward system may all work to enhance the library of narratives resident in the police officer's mind.\textsuperscript{345}

b. Of Operational Changes and Paradoxes

I am not here suggesting any particular police training program. I am merely making the point that law enforcement institutions, research suggests, should be able to improve police officer accuracy through operational changes and revised training programs to educate police intuition rather than replace it and complement it with more systematic forms of reasoning.\textsuperscript{346} Educated intuition and improved guidelines can enhance police performance even in split-second decisions because intuition will still be at work.\textsuperscript{347} Where more time is available, police will have more opportunities to give systematic thought a greater—but not necessarily dominant—role, a point on which I will elaborate shortly.\textsuperscript{348} More time permits more opportunities for police to investigate and evaluate complex situations, time urgency being another condition that can enhance the influence of sometimes-flawed stereotypes, and a dearth of information likewise replaces conscious judgment almost entirely with heuristics that may be an inappropriate fit for the circumstances.\textsuperscript{349}

I want to note a seeming paradox. Reasonable suspicion and probable cause require \textit{individualized} judgment.\textsuperscript{350} But part of what I am suggesting here is to permit more informed generalizations to play a role. Some use of generalizations is unavoidable in human reasoning, so no reasoning is purely individualized or purely generalized.\textsuperscript{351} Rather, there is a spectrum, and the reasonable suspicion and probable cause concepts should be understood as favoring the more individualized end of that spectrum.\textsuperscript{352} I am not, therefore, arguing that generalizations alone can constitute reasonable suspicion, though the Court finds

\textsuperscript{345} See \textit{Harris}, supra note 275 (generally discussing training and police accountability strategies and effect of reward systems on police biases); \textit{Harris}, supra note 31, at 169–75 (discussing training to address subconscious or systemic causes of biased policing); Andrew E. Taslitz, \textit{Racial Auditors and the Fourth Amendment: Data with the Power to Inspire Political Action}, \textit{66 Law \\& Contemp. Probs.} 221, 291–94 (2003) (discussing police culture); \textit{Taslitz, supra} note 28, at 22–26 (discussing community interaction); \textit{infra} text accompanying notes 421–27.

\textsuperscript{346} See \textit{supra} note 345 and accompanying text.

\textsuperscript{347} See \textit{Taslitz et al.}, supra note 17, at 309–12 (discussing use of force policies).

\textsuperscript{348} See \textit{infra} text accompanying notes 379–401.

\textsuperscript{349} See \textit{infra} text accompanying notes 379–401.

\textsuperscript{350} See \textit{Taslitz, supra} note 13 (manuscript at 1–2).

\textsuperscript{351} See id. (manuscript at 18–19, 24).

\textsuperscript{352} See id.
that at least some generalizations are sufficient to do so. Because generalizations must unavoidably play some role, however, I am arguing that reasonable efforts be made to select apt generalizations, ones supported by as much empirical data as are reasonably available that are a good “fit” for the situation. By “fit” I mean using the right generalization—the one most likely accurate in a particular case and, therefore, in a sense, an individualized judgment about that case.

Finally, I have also sought in this subsection to make the point that the risks of error from heuristics are sufficiently great as to counsel against too-hasty deference to police hunches and intuition. Although intuition can and should play a role, it must be subject to correctives, including the officer’s ability to expressly justify his actions to third parties on more objective grounds, the final point of this section, to which I next turn.

c. Explanation as Bias Correction

Motivated reasoning—the desire to achieve a particular outcome—has pernicious effects on human judgment, including expert judgment. Without motivation, of course, humans would take no action. But what motivates us influences what we perceive in the first place as well as what we make of these perceptions. Motivation affects where we direct our attention and what we see as important. Indeed, motivations affecting what we perceive and how we interpret perceptions arise before we have any information, before we observe, remember, and plan. Motivated reasoning thus encourages selective perception and memory, seeing and remembering only the data that confirms our prejudice, and leads to self-deception. But there is at least a partial cure for the ills of motivated reasoning, as two commentators explain:

353 See Illinois v. Wardlow, 528 U.S. 119, 121 (2000) (finding the generalization that flight from the police in a high-crime neighborhood reflects consciousness of guilt sufficient to support reasonable suspicion, justifying a stop); Taslitz, supra note 105, at 2299–2302.

354 See Taslitz, supra note 13 (manuscript at 24, 35).

355 See KAPLAN & KAPLAN, supra note 2, at 134–36.

356 See id. at 136.

357 See id.

358 See id.

359 See Ziva Kunda, The Case for Motivated Reasoning, 108 PSYCHOL. BULL. 480 (1990) (surveying the literature supporting this point).

360 KAPLAN & KAPLAN, supra note 2, at 137.

Fortunately, there is a . . . method for achieving accuracy . . . . Psychological studies where the subjects, having made a decision, must then explain their thought process to others, or must commit themselves to the consequences of their choice (by, for example, having their views published), show that when we have to justify our reasoning, we disengage it from our prior motivation and suddenly start thinking much more like scientists. We consider more alternatives, admit more complexity, devise better tests for determining cause and effect. We fall less into what’s provocatively called the fundamental attribution error: assuming that another does what he does because that’s just his nature, whereas I respond appropriately to the situation. The most powerful technique for avoiding motivated reasoning turns out to be imagining how you would argue the other side.362

For example, a hospital’s asking its pediatricians voluntarily to explain why they chose to perform each cesarean section—with no sanction being imposed for whatever answer they gave—alone resulted in cesarean rates dropping dramatically from 17.5% to 11.5%.363 This drop resulted in no increased patient risk, demonstrating that the pre-justification rates subjected far too many women to an unnecessary and serious medical procedure.364 Likewise, asking gay men to record why they had unprotected sex alone greatly reduced its occurrence.365

There is no reason to believe that the power of explanation to reduce motivated reasoning and its associated frequent pathologies should be any less for police than doctors, gay men, or the other groups for which research studies have been done.366 This observation alone justifies avoiding simple deference to police judgment and requiring police to explain their search and seizure decisions, whether through warrant affidavits or during suppression hearings. As two recent writers on the subject of motivated reasoning note, “Explaining yourself, admitting other possibilities, thinking like the other fellow—these take us a long way from the flow experience [of non-introspective immersion in the moment], but they bring the world as a whole much closer to safety.”367 Just so.

362 Kaplan & Kaplan, supra note 2, at 138.
364 Kaplan & Kaplan, supra note 2, at 139.
365 See George Loewenstein, Out of Control: Visceral Influences on Behavior, 65 Organizational Behav. & Hum. Decision Processes 272, 286–87 (1996); see also supra note 195 (citing additional studies on the debiasing power of explanation).
366 See supra note 365; infra notes 454–81 and accompanying text (summarizing many of the studies).
367 Kaplan & Kaplan, supra note 2, at 138–39; see id. at 129 (defining the “flow experience” of harmonious action, drawing on the work of psychologist Mihaly Csikszentmihalyi).
Experts generally do not start answering a question, solving a problem, or conducting an investigation by exhaustively listing all possible options. Rather, their experiences lead them to focus, at least initially, on some aspects of a situation more than others. They review these cues to search for patterns leading to hypotheses. Relying on their hunches about what matters and why gets them started.

However, well-respected researchers in practical decision making argue that hunches do not and should not end the matter. Experts must use their imaginations, drawing on their stock of mental models, to simulate what would happen if they followed their initial instincts. Experience and intuition aid the imagination, but the act of imaginative testing is also a decidedly conscious one, so its outcomes can be explained to others. If the outcomes are not adequate, the expert relies on intuition to craft an alternative hypothesis, imaginatively testing it as well. When a hypothesis is found that adequately survives testing, existing mental models generate action scripts—guides to choice of decision and resulting behavior. This model is called “Recognition Primed Decision” [RPD], and it can be diagramatically represented thus:

\[\text{Diagram}\]

See KLEIN, supra note 5, at 83, 94.
See id. at 94–95.
See id. at 88–91.
Id. at 91. It is thus the novices who carefully list and deliberate among options rather than testing the first option that hits them as making sense. See Raanan Lipshitz & Orit Ben Shaul, Schemata and Mental Models in Recognition-Primed Decision Making, in NATURALISTIC DECISION MAKING 293, 295 (Caroline E. Zsambok & Gary Klein eds., 1997).
See KLEIN, supra note 5, at 90–91.
See id.
See id. at 91 (“The pattern matching is the intuitive part, and the mental simulation is the deliberate analysis.”).
See id. at 90.
See id. at 90–92, 96–98.
KLEIN, supra note 5, at 90, is the source for this diagram.
This model makes sense in emergency situations, such as in the midst of fighting a fire, choosing where to land a defective airplane, or stopping a dangerous fleeing suspect. But where time allows—even modestly more time—imaginative testing alone is insufficient. Experts will still intuitively form a tentative primary hypothesis, where feasible, to explain their observations. But, as time permits, they must empirically test the hypothesis rather than merely imaginatively doing so.

For example, in one simulation, a group of anesthesiologists discovered that a mannequin’s breathing tube was not working properly. Indeed, the experimenters had created an unusual cause for the problem. One group of anesthesiologists merely stalled, unable to generate a diagnosis, unwilling to try alternative treatments. A second group fixated on the most obvious diagnosis and, when it failed, merely stuck to variations on that (still useless) theme. A

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379 See id. at 87 (noting that his “RPD” decision-making model is particularly apt where actors face “some time pressure and uncertainty”); id. at 88–93 (reviewing real world examples of the model in action).

380 See id. at 152–54 (arguing for a “speculate-and-test strategy” where empirical testing of a sort is available).


382 See KLEIN, supra note 5, at 152–54 (summarizing the study).

383 Id. at 152.

384 Id. at 152–53.
third group speculated wildly through all theoretical possibilities, repeatedly weighing the pros and cons of each without thoroughly testing them.\textsuperscript{385} But the fourth group—the "adaptive problem solvers"—used "initial diagnoses as springboards for conducting subsequent tests and treatments."\textsuperscript{386} When one treatment failed, they turned to what was initially a next-best choice, speculating wildly, choosing among the speculations, and then testing each one-by-one.\textsuperscript{387} They tested in different ways: by fiber optic scopes, by the feel of the suction catheter, by the suctioning's dry sound, and by comparing "how far they could insert the suction catheter versus the length of the breathing tube."\textsuperscript{388} Ultimately, these four testing strategies led them to the correct conclusion: a hardened mucus plug in the breathing tube.\textsuperscript{389} Their success turned on their willingness to speculate-and-test each hypothesis without committing too early to any one of them.\textsuperscript{390}

Note that the anesthesiologists did not keep a thoroughly open mind. They made best guesses, while keeping other possibilities in mind.\textsuperscript{391} The guesses formed expectancies that could be tested and falsified while heightening attention to novel events or to the absence of expected ones.\textsuperscript{392} Simultaneously, the experts were anticipating one hypothesis's failure and planning what to do next should that occur.\textsuperscript{393} Continuing proactive data gathering combined with a willingness to discard inadequate hypotheses did the job.\textsuperscript{394}

A police officer, like the one in \textit{Terry v. Ohio},\textsuperscript{395} seemingly watching several men repeatedly "casing out" a store for a robbery, may often have as much time as anesthesiologists struggling to cure a breathing problem before a patient dies. But the officer lacks access to the kind of ultimate testing available to the anesthesiologists. Police might, therefore, simply act, seeing whether their decision achieved their goal: capturing criminals. The equivalent to the

\textsuperscript{385} \textit{Id.} at 153.
\textsuperscript{386} \textit{Id.}
\textsuperscript{387} \textit{Id.}
\textsuperscript{388} \textit{Id.}
\textsuperscript{389} \textit{Id.}
\textsuperscript{390} \textit{See id.} at 153–54.
\textsuperscript{391} \textsc{Arthur S. Elstein et al., Medical Problem Solving: An Analysis of Clinical Reasoning,} at ix (1978) (concluding that physicians making diagnoses immediately begin to speculate rather than awaiting all the data).
\textsuperscript{392} \textit{See Klein, supra} note 5, at 158–59 (making this general point); \textit{id.} at 159 (noting that experts "don’t necessarily see discrepancies any more quickly, but when they do spot discrepancies, they understand their meaning more fully and can deal with them more confidently") (internal quotation marks omitted); Karl E. Weick & Kathleen M. Sutcliffe, \textit{Mindfulness and the Quality of Organizational Attention,} 17 \textsc{Org. Sci.} 514 (2006).
\textsuperscript{393} \textit{See Klein, supra} note 5, at 158–60.
\textsuperscript{394} \textit{See id.} at 158–59.
\textsuperscript{395} 392 U.S. 1, 6 (1968).
police are people too

anesthesiologists’ situation for an officer might thus be to stop-and-frisk persons on a mere hunch, revealing evidence of crime or not. Such officer “testing” would, of course, be blatantly unconstitutional.\footnote{See \textit{Taslitz et al., supra} note 17, at 317–68 (explaining the \textit{Terry} doctrine).} But that does not mean that the officer has no means of testing his hypothesis that “they are casing the joint” short of such unconstitutional action.

Under many circumstances, an officer can continue to observe, gathering more data, attempting to focus in particular on data that may disconfirm his working hypothesis. Perhaps he saw one suspect exit a car. He might have time to call in the license plate to see whether it, or its attached car, is stolen or whether the driver has a record. In such instances, little more than a radio call, watchful waiting, and careful evaluation, may be required. The officer need only have “reasonable suspicion” that criminal activity is afoot, a fairly low standard, to stop someone.\footnote{See \textit{id.} at 349–53.} Yet the stop itself, though implicating the Fourth Amendment, is a relatively modest intrusion designed to permit further data gathering—further testing of hypotheses—before settling on one held with sufficient confidence (“probable cause”) to justify more invasive action.\footnote{The whole point of the \textit{Terry} stop is indeed to permit “investigation” and “reasonable inquiries” to either dispel officer suspicion or confirm it. \textit{See} \textit{Terry v. Ohio}, 392 U.S. 1, 21–23 (1968).} The cop on the beat might also work alone, but if she has a partner, she can at least imaginatively test ideas with the partner, also eliciting the latter’s aid in “empirically” testing them.

Police seeking search warrants, of course, are often far more likely to have greater time to investigate suspicions. They can interview witnesses, do forensic testing, run background checks, and brainstorm with colleagues.\footnote{See \textit{Taslitz et al., supra} note 17, at 49–51 (summarizing pretrial police investigation teaching).} For them, the speculate-and-test model may make even greater sense. Indeed, because probable cause is a more robust concept than reasonable suspicion,\footnote{See Taslitz, \textit{supra} note 13 (manuscript at 2–3) (describing reasonable suspicion as “probable cause light”).} one way to give the former concept more vigor is to associate it with a more rigorous speculate-and-test-like duty to investigate and evaluate as an aspect of the probable cause determination.\footnote{See \textit{infra} text accompanying notes 482–548 (analyzing the Fourth Amendment duty to investigate).}

The RPD model presupposes that experts are able to overcome, or at least diminish the influence of, certain biases, such as the confirmation bias.\footnote{See \textit{infra} text accompanying note 138 (discussing the confirmation bias).} That, too, requires careful training. Such training must give feedback not on the outcomes of individual actions (finding evidence or not), but on the process of
Yet educating officers about overall outcomes of certain decision strategies—one way of conveying the "outside view"—is wise. For example, an officer using a drug courier profile may rejoice at successfully catching a drug courier. However, a profile means that the officer is looking for some things but not others. Consequently, the officer might be missing many more drug couriers simply because they do not fit the profile. Empirical data in the area of racial profiling has supported exactly such a conclusion: alternative strategies catch more, not fewer, criminal wrongdoers.

Where relevant data is unavailable, police administrators might be advised to systematically encourage both (profiling and non-profiling) strategies, comparing the results, that is, engaging in their own data gathering: Alternatively, assume that an officer using a drug courier profile finds evidence of drug possession or distribution in 5% of the cases where he stops suspects matching the profile. The officer might be quite pleased by this outcome. But does a strategy that proves correct only 5% of the time establish "reasonable suspicion" for the stop in the first place? There is a precedent-based argument that the answer to this question is "no." The answer is ultimately, of course, a normative one, and the

403 See, e.g., KLEIN, supra note 5, at 166 ("To improve, we need process feedback about the way we are acting."); id. at 173 ("For cognitive skills, we want feedback to change the way we think, not just add more facts into our memory."); id. at 174–76 (explaining the necessity of feedback that is clear, actively involves the learner in the feedback process, will not be distorted in memory, and that challenges our mental models). It is important to note that the RPD and speculate-and-test strategies try to marry the quick, automatic, subconscious system of thinking and the slower, more flexible conscious system of thinking. See id. at 93–94; Marvin S. Cohen et al., Critical Thinking Skills in Tactical Decision Making: A Model and a Training Strategy, in MAKING DECISIONS UNDER STRESS: IMPLICATIONS FOR INDIVIDUAL AND TEAM TRAINING 155 (Janis A. Cannon-Bowers & Eduardo Salas eds., 1998) (setting forth a program training participants in the speculate-and-test method of decision making).

404 See AINSWORTH, supra note 155, at 10 (using similar example).

405 See id. ("The gun-carrying drug dealer whose physical appearance and demographic characteristics do not match the template will of course go unchallenged, and as [a] result[,] the officer may never feel a need to revise the template in the future.").

406 As police research psychologist Peter Ainsworth explains:

The officer may even feel vindicated by the fact that the person who was stopped was in possession of a weapon or drugs and was subsequently convicted of a criminal offence. But such a 'result' may do little to encourage the officer to look for other dangerous individuals whose physical appearance is different from that of the majority of people who are stopped and searched.

Id. I use "profiling" as an example to make the point starkly, but officers often rely on a tacit "template" even if they do not use a more formal profile. See id.

407 See HARRIS, supra note 31, at 73–90 (surveying empirical data demonstrating that profiling using race as even a factor is far less effective in identifying criminals than alternative, behavior-focused strategies).

408 See AINSWORTH, supra note 155, at 10 (offering similar example).

409 Id.
degree of accuracy needed to justify a search in society's eyes, or that of the Framers, or of any other chosen politico-legal reference group, might diverge from the degree demanded by the officer.\footnote{10}

2. Situational Awareness

A decision maker's situation can, often unbeknownst to her, bias her decision.\footnote{12} Numerous such situational forces may affect police decision making. Group conformity pressures, including discouraging the airing of views that contradict superiors and being under the sway of influential officers or of the prevailing sentiments of the group as a whole, can, for example, squelch the generation of new hypotheses or cut off new, potentially fruitful areas for investigation.\footnote{13} That can mean never finding a criminal wrongdoer or finding and prosecuting the wrong one. Indeed, tunnel vision has played an important role in several wrongful convictions, and it is plausible that group conformity pressures partly explain why.\footnote{14} Part of the solution is to provide structured opportunities for, and an institutional culture that encourages, dissent.\footnote{15}

\footnote{10}{The argument here is actually a complex one, but I will simplify it. The reasonable suspicion judgment is, in theory, one particularized to this suspect. There is reason to believe that judges read the precedent concerning the quantitative proof required to establish reasonable suspicion as 31\% likelihood of guilt or perhaps a bit less. See Taslitz et al., supra note 17, at 348-49. But if the judgment is truly particularized, that percentage should refer to the subjective likelihood of guilt, that is, roughly speaking, the subjective sense of being 31\% confident that this suspect is guilty of a crime. See Philip E. Tetlock, Expert Political Judgment: How Good Is It? How Can We Know? 12, 47-49 (2005) (illustrating subjective versus objective probabilities). But reliance on matching a profile as alone creating reasonable suspicion is a more generalized judgment, the argument being that a suspect who matches the profile—who fits into a general category—is "X" percent likely guilty. This judgment relies on objective likelihood or frequency notions of probability. In other words, if we used the 31\% figure for reasonable suspicion, that would mean that one out of every three persons stopped based on a profile match would be, for example, found in possession of drugs. A 5\% accuracy rate falls well short of this one-in-three success rate. Of course, this may be why the Court has never held that a mere mathematical match to a profile can alone establish reasonable suspicion, but neither has the Court barred reliance on profiles. See Taslitz et al., supra note 17, at 348-53.}

\footnote{11}{See Taslitz, supra note 13 (manuscript at 34-35).}

\footnote{12}{Maoussin, supra note 262, at 55, 58.}

\footnote{13}{See id. at 55-56; Cass R. Sunstein, Republic.com 2.0 46-73 (2007).}


\footnote{15}{See Maoussin, supra note 262, at 71-72 (cautioning against the "institutional imperative" to mindlessly imitate what peers are doing); Cass R. Sunstein, Why Societies Need Dissent (2003) (discussing the political benefits of dissent); Taslitz, supra note 345, at 294-95 (analyzing the dangers of certain police institutional cultures).}
Another aspect of the situation can be an officer's own personality and those of others sharing his assignment. Former Federal Bureau of Investigation [FBI] agent and police officer Dale Carson gives this example: "Cops [in high-crime areas] are keyed up and on the hunt. High-crime districts attract the toughest, wiliest, and most ambitious cops who want to lead their departments in felony arrests, rack up points, and be first in line for promotions." Such zeal for one's work may be admirable, but it also may lead to overzealousness. Thus, Carson insists that some officers are "inciters," intentionally engaging in insulting or unduly harsh behavior in the hope of promoting an angry response by a suspect, thus justifying an otherwise unjustifiable arrest on the now arguably legitimate grounds of disturbing the peace. The scandal involving the NYPD's Street Crimes Unit, which had been stopping large numbers of young minority males without reasonable suspicion, is a still more vivid example. Police superiors ultimately had no choice but to disband the Unit.

Incentives are also salient aspects of the decision-making environment. Local police are most often rewarded for responding to calls, making street stops of suspicious people, and making traffic stops. Police departments also often reward arrests, regardless of whether they lead to prosecutions or convictions. This incentive structure may foster higher numbers of police interventions than would otherwise likely result—interventions based on minimal investigation.

416 See AINSWORTH, supra note 155, at 34–45 (analyzing the importance of individual officer personality to effective policing, and thus the need for its early consideration at the time of officer selection).

417 CARSON & DENHAM, supra note 26, at 155.

418 See id. at 142–45.

419 See I. Bennett Capers, Crime, Legitimacy, and Testifying, 83 IND. L.J. 835, 851–52 (2008) ("Between 1997 and 1998, NYPD's elite street crime unit conducted nearly 40,000 frisks that revealed no contraband at all. Most troubling, these rates for [B]lacks and Hispanics remain disproportionately high even when numbers are adjusted to reflect higher offending rates in particular neighborhoods.") (footnote omitted); David Kocieniewski, Success of Elite Police Unit Exacts a Toll on the Streets, N.Y. TIMES, Feb. 15, 1999, at A1 (noting that New York City's Street Crimes Unit stopped tens of thousands of persons each year).


421 See MAUBOUSSIN, supra note 262, at 31–36 (discussing how incentives, including financial ones, can harm professional judgment and promote tunnel vision). Mauboussin counsels, in addition to creating the right incentives, seeking dissent whenever possible; keeping track of previous decisions to minimize hindsight bias concerning a particular tactic's value; and using base rates and guidelines mitigating the influence of the representativeness and availability biases as additional ways to combat tunnel vision. See id. at 34–36.

422 CARSON & DENHAM, supra note 26, at 64–65.

423 Id. at 61.

424 See id. at 66–67.
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By contrast, the FBI rewards the number of quality arrests and resulting convictions. That incentive structure encourages a much greater degree of investigation across the board than is true of the vast majority of cases handled by the local police. Indeed, the FBI’s preference is not to arrest on probable cause, but rather to develop as strong a case as possible before acting. Local police departments lack the detectives and other resources to do more thorough investigations in larger numbers of cases. However, that resource constraint is, of course, yet another aspect of the situation that may affect decision-making processes and outcomes, both consciously and subconsciously.

Decision theorists attentive to such things thus counsel self-conscious efforts at awareness of situational influences and how they may encourage tunnel vision; revamping incentive structures as much as feasible to avoid investigative blinders; institutional structures to counter silencing stemming from the desire to be part of the in-group; guarding against inertia (doing things one way because that is the way they have always been done); and avoiding taking a particular course of action because it is the “easy way out.” They further stress the importance of focusing on decision-making procedures and strategies rather than outcomes.

Moreover, such a focus should help professionals separate luck from skill. Such separation requires experts, here police, to be attentive to such phenomena as “reversion to the mean” (extreme observations in isolated instances can be misleading because, over time, repeated events will tend toward the average); the “halo effect” (allowing observation of one good trait to lead to viewing a person as good overall, thus not a worthy suspect); sample size; and changes in circumstances between observations. In short, it requires police once again to take an attitude akin to the “outside view.”

3. Benefits of the Articulation Requirement

Reasonable suspicion must be based on “specific and articulable facts.” Although not always so phrased, a similar requirement governs probable cause.

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425 Id. at 67.
426 See id. at 67, 126.
427 See id. at 67 (arguing that FBI incentive structures “direct[] them to arrest more serious criminals, and to accumulate more evidence before making an arrest”).
428 See CARSON & DENHAM, supra note 26, at 127.
430 See id. at xx.
431 See id. at xx–xxi.
432 Id. at 120–23, 129, 132–36. Mauboussin also emphasizes the importance of training professionals to empathize with others because a more accurate understanding of others’ thoughts and actions improves decision making. Id. at 139.
433 See id. at 1–16.
434 Terry v. Ohio, 392 U.S. 1, 21 (1968).
Part of the argument for deferring to police intuition is that intuition has value but, because it works at a subconscious level, intuition simply cannot be articulated.\textsuperscript{436} Much of this article has demonstrated that this assertion is not necessarily so. Here I want to amplify that argument by means of illustration, then summarize the error reduction and related advantages of an articulation requirement.

i. Articulation of Hunch-Based Reasoning Is Possible

One real-world illustration of the point involves the manager of an offshore oil rig.\textsuperscript{437} A trapped bubble of natural gas on such a rig had required a standard response: injecting mud into the pipe to create countervailing pressure.\textsuperscript{438} But the rig manager’s “gut” prompted him to withhold the order to proceed.\textsuperscript{439} He flew out to the rig and ordered a systematic search for leaks or anything else suggesting that standard procedure was unwise.\textsuperscript{440} That search indeed revealed a problem—one that would have resulted in causing the rig to explode and kill all onboard had standard procedure been followed.\textsuperscript{441} The manager safely resolved the problem by alternative means.\textsuperscript{442} When later pressed for what his gut was telling him, he “remembered that what was bothering him was the size and depth of the bubble.”\textsuperscript{444} Those unusual features triggered his sense of caution.\textsuperscript{444}

It might be argued, however, that the manager’s later-articulated explanation of his “gut” was a post hoc invention, an effort to make current conscious sense of what his subconscious had already done. Yet that sense making occurred without his having had access to his true subconscious motivations. If so, the point is irrelevant. The bubble was of an unusual size and depth, an objective explanation with which he likely could have justified his caution to his superiors at the time.

The manager did not know at the time what the bubble’s size and shape meant. But it triggered not alternative action to solve the problem of the bubble but rather further investigation. That investigation revealed objective evidence that an alternative course of action was required. Indeed, when the manager first called his supervisor to report his intention to depart from the standard procedure, the supervisor’s response was, “Are you crazy?”\textsuperscript{445} But when the manager explained

\textsuperscript{435} See Taslitz, supra note 13 (manuscript at 92).
\textsuperscript{436} See supra text accompanying notes 38, 54–55.
\textsuperscript{437} KLEIN, supra note 5, at 26 (recounting this example).
\textsuperscript{438} Id.
\textsuperscript{439} Id.
\textsuperscript{440} Id.
\textsuperscript{441} Id.
\textsuperscript{442} Id.
\textsuperscript{443} Id.
\textsuperscript{444} See id.
\textsuperscript{445} Id.
what his investigation had revealed, the supervisor agreed that an alternative approach was required.446

A second example involves a firehouse commander.447 A social scientist investigating expert decision strategies interviewed the commander, asking him to recall difficult decisions or ones in which the commander’s experience proved critical.448 None came to mind. The interviewer thus changed his tactic, simply asking the commander to describe his last fire.449 The commander did so, characterizing the incident as a “simple house fire.”450 Seeing smoke coming from the back of the house, the commander guessed that it came from a kitchen fire, which his inspection confirmed. Accordingly, he told his crew to enter the house through the front door with a hose, and they did so, extinguishing the fire.451 To the commander, no real decision needed to be made at all.452

The interviewer, however, was surprised. Why did not the commander hit the fire from the outside, in the back where it started, thus avoiding having his men exposed to the danger of being inside an actively burning house?453 Here is how the interviewer described the commander’s reaction:

He looked at me with contempt. That’s what a volunteer fire department might do. The problem is that by hitting it from outside you’re going to push it into the house where it can spread in all kinds of ways. No, it’s much better to go into the house and push it outside. Of course, if there is another exposure outside, say another building right next to it, then you might have to do an external attack, but that’s really a last choice.454

This example too teaches important lessons. The commander was unable to consciously access much of the content of his experience and intuition in the abstract. When confronted with the discipline of describing a concrete, individual incident, however, he was able to do much better. Even then, his actions had been so automatic that he did not even bother explaining them to the interviewer. But when the interviewer challenged the commander, the commander was readily able to reflect on and explain the reasons for his actions. Whether the articulated reasons were in some cosmic sense the “truly” motivating ones—and I suspect

446 Id.
447 Id. at 88.
448 Id. at 88–89 (recounting this story).
449 Id. at 88.
450 Id.
451 Id.
452 Id.
453 Id.
454 Id. at 88–89.
they were—the reasons were certainly not lies. They were based upon objectively verifiable evidence easily corroborated by the other firefighters and sufficient to justify his actions to a third party.

There is no reason to believe that police are any different from oil rig managers or firehouse commanders. Police, like all experts, are capable of articulating their reasons for action in an objectively verifiable fashion permitting those reasons’ sufficiency to be judged by relevant third parties.

ii. The Virtues of Articulation

The relevant third parties who must judge the sufficiency of police reasons for action include police superiors, judges, prosecutors, defense attorneys, legislators, the media, and the general public. The requirement of submitting an affidavit in support of a search or arrest warrant application provides a written statement of an officer’s justifications. The device of the suppression hearing, combined with Terry’s mandate that reasonable suspicion be based upon specific and articulable facts, provides an oral statement of reasons, reducible to a transcript, reviewable in a way similar to that permitted by the search warrant affidavit.

One benefit of such an articulation of reasons for action is error correction. In theory at least, transparency and accountability—favorite topics of much recent criminal procedure academic literature—promote error correction. Third parties, such as a judge, may find an officer’s statement of reasons inadequate, thus, for example, denying a search warrant. Such denial is not final but gives police an incentive to investigate further, then file a new, better-justified warrant application. In other instances, such as suppression hearing review of a previously conducted stop allegedly based upon reasonable suspicion, further

455 See generally WALKER, supra note 218 (describing various police accountability mechanisms and audiences at book length); HARRIS, supra note 275 (similar); Marc L. Miller & Ronald F. Wright, The Black Box, 94 IOWA L. REV. 125, 137–41 (2008) (discussing prosecutor’s relationship with the police concerning the exclusionary rule).

456 See TASLITZ ET AL., supra note 17, at 237 (discussing and illustrating the affidavit requirement and its meaning).


459 Alternatively, it may merely encourage police to engage in “judge shopping,” looking for another judge who will rubber-stamp almost any warrant application. If there are such judges, that may undermine proper incentive structures. On the other hand, even if judges vary in how strict a test they set for issuing a search warrant, as long as all judges adhere to at least some minimum standard beyond automatic approval, there is at least some modest incentive for police to explain the bases for their warrant request with some measure of detail. See Laurence A. Benner & Charles T. Samarkos, Searching for Narcotics in San Diego: Preliminary Findings from the San Diego Search Warrant Project, 36 CAL. W. L. REV. 221, 223, 260–61 (2000) (discussing judge shopping by police seeking warrant approval).
investigation is not an option. But error correction is still possible in the sense that the constitutional wrong done is redressed.\footnote{See \textsc{Taslitz et al.}, supra note 17, at 613–22 (discussing status quo ante and similar justifications for the exclusionary rule as a means of error correction and redress for constitutional wrongs).}

Transparency and accountability also promote error-reduction. Officers' merely anticipating that evidence found during unjustifiable searches will be suppressed may prompt those officers to do sufficient investigation to avoid suppression in the first place.\footnote{This is, in any event, the deterrence theory that the Court insists is the major justification for the exclusionary rule, see \textit{id.} at 615–16, though authors disagree on whether, and the degree to which, empirical data demonstrate the effectiveness of this justification. \textsc{Compare Samuel Walker, Taming the System: The Control of Discretion in Criminal Justice 1950–1990 9, 11, 15, 45–46, 49–50 (1993)} (arguing that there is evidence of at least a modest but important deterrent effect) \textit{with Slobogin, supra note 128, at 365 (arguing the rule has not had a significant deterrent effect).}}\footnote{\textit{See Miller & Wright, supra note 455, at 137–41.}} Even without a suppression remedy, officers' knowing that they need a prosecutor's approval or will face a superior's review may encourage compliance.\footnote{Christopher Slobogin suggests that under the current exclusionary rule regime police face no real risk of either sort of injury nor of a monetary penalty. Slobogin, \textit{supra} note 128, at 365–90. Accordingly, Slobogin recommends replacing the exclusionary rule with a system of liquidated damages or penalties and a beefed-up internal disciplinary process. \textit{See id.} at 386–406.} This supposition turns, of course, on officers having reason to believe that they will \textit{in practice} face professional sanctions, or at least reputational injury, if their explanations for their actions fall short.\footnote{\textit{WALKER, supra note 461, at 49–50} (arguing that departmental training programs are indeed the primary way that the exclusionary rule deters police error).}

Suppression also may create an incentive for more responsible action in the future. Such action may include improved training programs to give officers the tools to do better.\footnote{\textit{Compare id. at 9, 11, 15, 45–46, 49–50} (concluding that there is deterrence) \textit{with Slobogin, supra note 128, at 363–71} (concluding the opposite).} Whether, as an empirical matter, suppression does deter is subject to dispute.\footnote{\textit{WALKER, supra note 461, at 49–50.}} Yet recent evidence arguably suggests at least some modest deterrent effect.\footnote{\textit{Thus, if deterrence is inadequate, the fault may lie in the remedy, but not in the justification requirement. For example, even under an alternative remedial regime, whether an officer acted negligently, grossly negligently, recklessly, or intentionally would seem relevant to the degree of the penalty imposed upon the officer, see Slobogin, \textit{supra} note 128, at 411, 420, and that would require giving an officer a chance to explain her actions. Moreover, what occurred must be recreated, and, at least for now, that requires officer explanation. Even if technological advances eventually make videotaping officer search and seizure activity routine, a tape does not necessarily "speak for itself," and an officer wanting to avoid a sanction will likely insist on an opportunity to explain. \textit{See}}
required to articulate such reasons, their actions cannot be judged by any fair standard. Error reduction, indeed error identification, becomes impossible. Furthermore, empirical evidence in analogous areas suggests that police who know that they must explain their actions to third parties will make fewer errors in the first place, because a justification requirement appears to compensate significantly for subconscious biases.\footnote{See supra text accompanying notes 362–65.}

Articulating justifications may also help limit police officer discretion. The more detailed justifications police must offer, the less willing they should be to act without good reason. A good-reason limitation necessarily constrains discretion.\footnote{See STEVEN J. BURTON, JUDGING IN GOOD FAITH (1992) (articulating a book-length justification for this and related points).} Some commentators believe that the Court currently requires too little by way of officer explanation, despite rhetoric to the contrary.\footnote{See generally Harris, supra note 211, at 975–76 (crafting an extended argument that, despite Terry’s requirement that officers identify “articulable” bases to permit robust judicial review of their discretion, lower courts generally merely defer to highly generalized police judgments).} Consequently, officer discretion is, under this view, broader than is wise.

Indeed, in practice, officers feel comfortable finding suspicion in a wide array of common behaviors by the law-abiding. Police are taught, for example, that making a call while facing the wall at a public phone is a suspicious activity.\footnote{See CARSON & DENHAM, supra note 26, at 150.} Yet there may be a host of reasons, such as calling a lover, apologizing to a friend, or admitting to foolish behavior, for seeking some measure of privacy when making a phone call in public. Police also consider perfect driving, driver-slouching, perfect use of turn signals, and stretching one’s neck to see in the rearview mirror as “suspicious” driving behaviors.\footnote{Id. at 224–25.} I routinely engage in all but the first of these behaviors whenever I drive. I engage in the first, perfect driving, admittedly only when I fear police are nearby but that is only because I sometimes speed a bit, not that I am hiding some more serious crime. The point is not that these behaviors should be irrelevant to police, but rather that allowing too heavy an emphasis on behaviors common among honest folk or that these behaviors are too subjective (when is someone “slouching” rather than simply not sitting “ramrod straight”?) enormously expand police discretion. Those thinkers who see limiting discretion as the Fourth Amendment’s primary goal will not be pleased with the result.\footnote{See Maclin, supra note 55, at 233–35.}

Undue police discretion also risks a conformist society. As some former officers admit, nonconformity is, in effect, now punished by arrest.\footnote{See CARSON & DENHAM, supra note 26, at 84–100, 108, 153.} Police find

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suspicion in bad manners; “low social backup” (few identifiable family or friends); the “urban outdoor lifestyle” of spending lots of time on the street—a lifestyle that may result from poverty or cultural factors; and having a “bizarre” appearance, including long dreadlocks, “strange” topknots, shaved heads, scruffy beards, or tattooed forearms.\textsuperscript{475} Police may also be drawn to heavy accents, persons seeming to live in the moment, profanity, transvestite clothing, “outrageous T-shirts,” and a “hoodlum strut.”\textsuperscript{476} Again, these observations do not mean that dress or “lifestyle” behaviors are irrelevant. Jail tattoos, gang colors, and mini-skirt-wearing by women holding many condoms are all reasons to raise officer suspicion, though perhaps insufficient in themselves to justify many officer actions. But to the extent that officers can articulate as primary or major reasons for action a suspect’s engaging in majoritarian “values[-]affront[ing]” behaviors or a dissident lifestyle, officer action encourages a uniformity of values and behavior antithetical to the spirit, if not necessarily the letter, of First and Fourth Amendment values.\textsuperscript{477} A reasons-articulation requirement can be one helpful tool in deterring that outcome.

Moreover, if courts and other legal actors take seriously the \textit{individualized} suspicion requirement, police must identify reasons for action specific to this case rather than relying solely on mere generalities.\textsuperscript{478} That focus at its best can require police to think hard before acting and encourage showing respect to a suspect as an \textit{individual}, while avoiding showing disrespect for salient social groups by treating the individual as suspicious merely because of his membership in that group (as occurs in racial profiling).\textsuperscript{479} Relatedly, the sense of being judged as an individual is central to the perhaps innately human, perhaps culturally instilled, American sense of fairness.\textsuperscript{480} Yet public perceptions of fair treatment of individuals and groups by officers increase overall obedience to law and willingness to cooperate with the police.\textsuperscript{481}

In sum, the reasons-articulation requirement is one helpful strategy in error reduction, crime control, and enhancing law enforcement effectiveness and legitimacy, though articulating reasons for action will not alone achieve these goals. Moreover, at least sometimes, the articulation requirement contributes to a police duty to investigate. It is this last point to which I next turn.

\textsuperscript{475} Id. at 84–88.
\textsuperscript{476} Id. at 91–95, 108–12, 153–54.
\textsuperscript{477} See id. at 95 (discussing “values-affronting” lifestyles); TASLITZ, supra note 19, at 56–67, 301–02 (discussing the close connection between the First and Fourth Amendments); Andrew E. Taslitz, \textit{The Fourth Amendment in the Twenty-First Century: Technology, Privacy, and Human Emotions}, 65 LAW \& CONTEMP. PROBS. 125, 158–69 (2002) (discussing how policing can serve to punish values-affronting lifestyles, such as open displays of homosexual behavior during the 1960s).
\textsuperscript{478} See Taslitz, supra note 13 (manuscript at 6–9).
\textsuperscript{479} See id. (manuscript at 58–65).
\textsuperscript{480} See id. (manuscript at 65–70).
\textsuperscript{481} See id. (manuscript at 41–58).
IV. THE DUTIES TO INVESTIGATE, EVALUATE, AND REPORT

A. The Duty to Investigate

1. The Nature of the Duty

The duty to investigate merits special attention. One commentator summarized the nature of this duty concisely:

The extent of an officer's duty to investigate is incorporated into the probable cause analysis. Courts generally have not imposed a stringent duty to investigate upon the police; rather, they frequently describe the duty to investigate as a duty to be reasonable. The duty to investigate depends on the circumstances of the particular case. The duty to investigate is defined by the strength or weakness of probable cause evidence. The existence of a "strong basis" for probable cause will eliminate the need for further investigation. However, weak probable cause evidence necessitates further investigation.

As this writer makes plain, the duty is to investigate evidence sufficient to individualize suspicion, that is, to link suspicion to a particular person or place. Courts recognize this duty in a number of cases involving probable cause, including suppression motions in criminal cases and civil damages actions. Reasonable investigation need not, of course, be sufficient to prove the case beyond a reasonable doubt at trial. Nor must it routinely exclude all defenses, such as an alibi. Nevertheless, to say that the duty is one of "reasonableness" is not to render it meaningless. Thus, some courts describe the duty as to

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483 See id. at 2009–12 (focusing on adequacy of proof that "the suspect" committed the crime).
484 See id. at 2009–28 (summarizing civil damages actions and criminal suppression motion cases).
485 See Taslitz, supra note 13 (manuscript at 1–9) (summarizing the quantitative proof requirements for probable cause).
486 See Romero v. Fay, 45 F.3d 1472, 1477–78 (10th Cir. 1995) (concluding that officer had probable cause despite failing to investigate the suspect's alibi claim because the officer's belief that all such witnesses would lie to protect the suspect was reasonable); cf. Gramenos v. Jewel Cos., 797 F.2d 432, 442 (7th Cir. 1986) (noting that police are not required to "follow the best recommended practices" because what is "wise" is not the same as what is "compulsory" under the Fourth Amendment; indeed, "[t]o collapse those two concepts is to put the judicial branch in general superintendence of the daily operation of government, which neither the [F]ourth [A]mendment nor any other part of the Constitution contemplates").
487 See Wilson v. Russo, 212 F.3d 781, 791 (3d Cir. 2000) (noting that routine probable cause analysis requires the officer to weigh the inculpatory versus the exculpatory evidence against
"properly investigate," others as the duty to be "thorough." Though the duty is rooted in the Fourth Amendment, some courts have added an additional Due Process duty to investigate where police have independent knowledge suggesting the suspect's innocence, independent, that is, from the suspect's mere claim that he is innocent of the crime.

Some courts likewise appear to vary the duty to investigate with the degree of intrusion involved. The duty is arguably strongest when police make an arrest. In such cases, some courts require police at least to "investigate basic evidence," for example, looking for fingerprints on a readily available surveillance video recording a robbery, and must "reasonably interview witnesses readily available at the [crime] scene."

*Walker v. Spiller,* a false arrest case based upon a claim of a lack of probable cause for the arrest, illustrates the duty to investigate. There, the trial

someone without ignoring either); *Ward,* supra note 482, at 2012 ("Police determination of witness credibility plays a prominent role in probable cause analysis.").

488 Smith v. Heath, 691 F.2d 220, 228 (6th Cir. 1982); but see Baker v. McCollan, 443 U.S. 137, 146 (1979) (police need not conduct an "error-free investigation" of an innocence claim).

489 See Moore v. Marketplace Rest., Inc., 754 F.2d 1336, 1346 (7th Cir. 1985) ("It is incumbent upon law enforcement officials to make a thorough investigation and exercise reasonable judgment before invoking the awesome power of arrest and detention.").

490 See *Baker,* 443 U.S. at 145 (concluding that failing to investigate an innocence claim where time permits would violate due process); Gay v. Wall, 761 F.2d 175, 179 (4th Cir. 1985) (concluding that an officer's detaining someone whom the officer knows is innocent may violate 42 U.S.C. § 1983); Pickens v. Hollowell, 59 F.3d 1203, 1208 (11th Cir. 1995) (finding, however, no duty to investigate a suspect's claim of innocence first raised at the time of her arrest because any contrary rule would mandate release every time an arrestee denied her guilt).

491 See *Brown* v. Byer, 870 F.2d 975, 981 (5th Cir. 1989) ("[i]nvestigation must yield objective circumstances justifying a good faith belief that there exists lawful authority to incarcerate the prisoner.") (internal quotation marks omitted); *Garcia* v. City of Chicago, 24 F.3d 966, 974 (7th Cir. 1994) (describing the Fifth Circuit's holding in *Sanders* v. *English,* 950 F.2d 1152 (5th Cir. 1992), as suggesting that "detention without investigation could be unconstitutional").

492 See *Romero* v. *Fay,* 45 F.3d 1472, 1475–77 (10th Cir. 1995) (declaring that the failure to so investigate violates the Fourth Amendment).


494 *Romero,* 45 F.3d at 1476.

495 No. 97-6720, 1998 WL 306540, at *6 (E.D. Pa. June 9, 1998). The original *Walker* trial judge's reconsideration decision not to dismiss the case was never overruled. However, a year later, in 1999, a new trial judge in the case determined that the failure to investigate the alibi was not error and did not negate the existence of probable cause; thus, that trial judge granted summary judgment for the defendants as to most counts of the complaint. See *Walker* v. *Spiller,* 54 F. Supp. 2d 421, 423 (E.D. Pa. 1999). This latter court reasoned that there is generally no duty to check an alibi; that probable cause was established by reliable eyewitness testimony; and that Walker had already been in custody, so there was no further infringement on his liberty. *Id.* at 424–27. I cite the first *Walker* opinion not for its precedential value but rather as an example of a court recognizing a very robust duty to investigate under some circumstances as an aspect of probable cause. That there is some duty to investigate seems logically undeniable, regardless of what any particular case holds, in that there
judge, upon reconsideration, vacated her original grant of summary judgment to the defense. The judge based her reconsideration order on the grounds that a jury could reasonably decide that police failed to adequately investigate evidence that could establish probable cause. Although police ordinarily have no Fourth Amendment duty to investigate alibi claims, the trial court found that such a duty was plausible in the case before it because of the otherwise weak evidence of probable cause. Specifically, Walker was linked to a robbery by the confession of another person—a confession discovered, however, to be false. Police claimed that they knew Walker had been involved in a series of other robberies, but the record before the court left it unclear whether the evidence of that link rested on anything more than the investigating detective’s own intuition. Police also relied on a photo identification of Walker by the victim without offering any reason to believe that the photographic identification was reliable. Given such

are some situations where probable cause is lacking. The only way to establish probable cause in such instances is to do further investigation in the hope of uncovering additional evidence that will establish probable cause. Nevertheless, as I will discuss further below, there is one recent United States Supreme Court case that could be read broadly to reject any duty to investigate, or at least any serious one. I argue here that, if so read, that is a mistake. See also Kuehl v. Burtis, 173 F.3d 646, 651 (8th Cir. 1999) (concluding that law enforcement officers have a duty to conduct a reasonably thorough investigation prior to arresting a suspect, at least in the absence of exigent circumstances and so long as law enforcement would not be unduly hampered if the agents wait to obtain more facts before seeking to arrest).


Id. at *6.

Id.

Id. at *5.

Id.

Given this otherwise weak evidence of probable cause, the court also found relevant Walker’s sworn allegations that his own confession at the time of his arrest was coerced by verbal abuse, see Walker v. Spiller, 54 F. Supp. 2d 421, 423 (E.D. Pa. 1999), foreshadowing later innocence movement concerns about the trustworthiness of uncorroborated confessions. See generally National Conference of Commissioners on Uniform State Laws, Uniform Electronic Recordation of Custodial Interrogations Act, with Prefatory Note and Comments (Post-Style Interim Draft Nov. 2009) (collecting and analyzing tentative recommendations to record the entire custodial interrogation process to serve numerous goals, including protecting the innocent from wrongful conviction); Richard A. Leo, POLICE INTERROGATION AND AMERICAN JUSTICE 288–89 (2008) (arguing, as a policy matter, for making significant corroboration a prerequisite to the admissibility of a confession). The probable cause determination is, of course, not the time for the ultimate determination of guilt or innocence, which is to be made by the jury at trial. But some modest duty of care should still be required because arrests made under circumstances raising a risk of error can join with later efforts, including tunnel vision, to result in a conviction of an innocent person based, for example, upon a false confession or a lying informant. See, e.g., Taslitz, supra note 170, at 130–33 (discussing false confessions); Taslitz, supra note 27, at 1097–99 (discussing lying or mistaken informants). Richard Leo argues that the risk of false confessions is sufficiently great where there is otherwise “flimsy” evidence of guilt that interrogation should only be permitted in the first place where there is already probable cause to arrest based upon other evidence. See Leo, supra, at 307–08.
seemingly shaky evidence, the court concluded that a jury would be free to decide that police failed to have probable cause to arrest, so further investigation was required to justify suspicion of this individual.\textsuperscript{502}

Perhaps the Walker court's concept of a duty to investigate was unusually muscular. As mentioned earlier, however, courts sometimes create a duty to investigate where there is reason to question an informant's credibility, a duty which some commentators nevertheless consider too weak.\textsuperscript{503} The primary flaw in such instances is that courts too readily rely on generalizations alone concerning credibility, for example, that victims must be assumed credible if they are ordinary citizens rather than criminals themselves, that private store guards must likewise be presumed credible, and that employers are unlikely to lie.\textsuperscript{504} These may be helpful guidelines, but they seem inadequate in the face of contradicting case-specific evidence calling for further investigation if suspicion is truly to be individualized.

Although the reasonable suspicion standard of proof falls short of that for probable cause, both standards require individualized judgments.\textsuperscript{505} Accordingly, a similar duty to investigate should inhere in both standards, even if that investigatory duty is somewhat lighter for reasonable suspicion than full-blown probable cause.

2. Pringle's Challenge to the Duty to Investigate

On the other hand, one fair interpretation of the United States Supreme Court's recent case, Maryland v. Pringle,\textsuperscript{506} is that it has gutted any serious duty to investigate carefully to establish substantial individualized suspicion.\textsuperscript{507} In Pringle, police stopped a car because the driver was speeding.\textsuperscript{508} In addition to the driver, the car contained a front-seat passenger, Pringle, and a rear-seat passenger.\textsuperscript{509} When the driver opened the car's glove compartment to get his registration, the officer noticed a large wad of bills inside, and the police asked for,
and received, the driver’s permission to search the car. The officer found $763 in the glove compartment and five plastic bags, each containing a “hit” of cocaine, concealed behind an upraised backseat armrest. The officer threatened to arrest all three persons unless someone confessed. No one did. Accordingly, the officer arrested all three men, releasing two only when Pringle later confessed to the crime.

When the case reached the United States Supreme Court, the Court concluded that there was probable cause to believe that any one or all three of the men in the car exercised dominion and control over the drugs. In particular, while purporting to pay homage to the individualized suspicion requirement and to reject guilt by association, the Court relied primarily on a generality, namely, that “[t]he quantity of drugs and cash in the car indicated the likelihood of drug dealing, an enterprise to which a dealer would be unlikely to admit an innocent person with the potential to furnish evidence against him.”

But, of course, as leading Fourth Amendment specialist Wayne LaFave has pointed out, the only person for whom there was arguably some individualized link to the drugs was the driver and owner of the vehicle, Partlow. It was Partlow’s consent that authorized the officer’s search of the car in the first place, and there is far more reason to believe that Partlow had put the money in the glove compartment. Absent evidence that Pringle actually saw that money, there is no basis for concluding that he was aware of its presence simply because he was a passenger in the seat nearest the glove compartment of a car that he neither owned nor drove. Nor, given the concealed location of the cocaine behind an upraised armrest in the backseat—where Pringle did not sit—was there reason to believe that he was aware of the drug’s presence.

Indeed, Maryland’s own law—which defines the elements of the crime for which police must have probable cause—expressly declares that the mere presence of drugs in a car can alone support an inference of possession by the passengers only if it is shown to have been open and visible to those passengers before the time of the arrest. As LaFave further notes, evidence of such visibility was entirely lacking, making it hard to see how there was any evidence linking Pringle

510 Id.
511 Id.
513 Id. at 368–69.
514 Id. at 369.
515 Id. at 374.
516 Id. at 373.
517 WAYNE R. LAFAVE, SEARCH AND SEIZURE: A TREATISE ON THE FOURTH AMENDMENT § 3.6(c), at 343 (4th ed. 2004).
518 Margaret Paris & Andrew E. Taslitz, Catering to the Constable: The Court’s Latest Fourth Amendment Cases Give the Nod to Police, 19 CRIM. JUST. 5, 5–6 (2004) (discussing the Court of Appeals of Maryland’s reading of Maryland criminal law).
to the crime. Likewise, the generalization that only those in a common drug enterprise will enter a car containing drugs together is hard to accept. Well-known criminal procedure professor Tracey Maclin points out that this argument rests on the flawed presumption that a car passenger will frequently be aware of its accessible, rather than its visible, contents, "even if those contents are hidden from view." But, argues Maclin, "[t]he innocent graduate student who is offered a ride home by a friend or classmate after a late-night party will not search underneath the seat, open the backseat armrest, or examine the glove compartment before accepting the ride home." Nor, continues Maclin, will "the office worker who offers to drive two colleagues to a weekend beach house late on a Friday night . . . demand the right to search the bags of his invitees before starting the trip." Justice Powell has, in another context, made a similar argument underscoring the flaw in the Pringle majority's reasoning:

"[T]here are countless situations in which individuals are invited as guests into vehicles the contents of which they know nothing about, much less have control over. Similarly, those who invite others into their automobile do not generally search them to determine what they may have on their person; nor do they insist that any handguns [or drugs] be identified and placed within reach of the occupants of the automobile. Indeed, handguns [and drugs] are particularly susceptible to concealment and therefore are less likely than are other objects to be observed by those in an automobile."

That leaves one more piece of evidence: the sole investigative effort by the officer to determine specifically who among the three men (multiple offenders were possible) "possessed" the cocaine. That effort was the officer's insistence that someone confess or he would arrest everyone. There are powerful Fourth and Fifth Amendment arguments that a suspect cannot be compelled to confess or to rat on friends on pain of arrest or other sanction. Nevertheless, at least one leading commentator has argued that the failure to respond to an officer's questions may be at least one relevant factor, though not a determinative one, in the individualized suspicion determination. Yet even this commentator

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519 LAFAVE, supra note 517, at § 3.6(c), at 344.
520 Paris & Tashitz, supra note 518, at 6.
522 Id.
523 Id.
525 See Maclin, supra note 521, at 420–21.
526 See LAFAVE, supra note 517, at § 3.6(f), at 364.
concedes that in Pringle such silence was the only evidence linking Pringle to the crime and was woefully insufficient.\textsuperscript{527}

The blatant weakness of an individualized reason to believe that Pringle was jointly or singly involved in possessing or distributing the cocaine seems hard to square with the unanimous nature of the decision and prior precedent. Professor Maclin concludes that the Court must silently be departing from its frequent insistence that there is only one standard for probable cause.\textsuperscript{528} Probable cause now means \textit{either} traditional probable cause or \textit{investigative} probable cause, the latter virtually eliminating any serious individualization requirement because that might hinder police investigation.\textsuperscript{529} Maclin elaborates:

\begin{quote}
\textit{Pringle} indicates that the justices view the probable cause test as being sufficiently flexible to serve multiple purposes. Probable cause serves the traditional function of setting the standard for identifying which persons should be arrested in order to initiate the process of prosecution. In this sense, probable cause is the standard used to apprehend the guilty and those who should be charged with an offense. \textit{Pringle} did not involve this traditional function of probable cause. Rather, \textit{Pringle} involved a different aspect of probable cause. \textit{Pringle} demonstrates that the justices also view probable cause as a standard, sufficiently elastic, to allow police to arrest and interrogate \textit{in order to decide which persons to charge}. Yet, on this view, probable cause is broad enough to tolerate arrests that serve an investigative function.\textsuperscript{530}
\end{quote}

Continues Maclin, "it is not surprising that the Rehnquist Court would perceive the probable cause standard as a tool to \textit{facilitate}, rather than hinder, police apprehension of multiple persons for purposes of interrogation."\textsuperscript{531} Lest his readers have any doubt about his point, Maclin flatly declares that "\textit{Pringle}—while paying lip service to individualized suspicion—effectively appears to have denuded probable cause of any such requirement."\textsuperscript{532}

Restated, the original duty imposed on police was to investigate for evidence of individualized suspicion, and only if their investigation adequately revealed such evidence could they arrest. But if Maclin's reading of \textit{Pringle} is right, and if it is not limited to its facts or to similar situations, probable cause no longer mandates adequate investigation to establish individualized suspicion \textit{before} arrest. Rather, probable cause may now be proven based almost entirely on

\footnotesize
\textsuperscript{527} Maclin, \textit{supra} note 521, at 412–13, 421–22, 425, 430 (describing LaFave's views about \textit{Pringle}, including that, contrary to the Court's conclusion, police lacked individualized suspicion).

\textsuperscript{528} Id. at 433–36.

\textsuperscript{529} Id. at 415, 433–36.

\textsuperscript{530} Id. at 435–36 (emphasis added).

\textsuperscript{531} Id. at 436.

\textsuperscript{532} Id. at 415.
generalizations, creating no police duty whatsoever to first conduct a successful search for individualizing evidence. However, probable cause as so defined by the Court functions not to command, but to permit later investigation to link the arrested individual to the crime. Under such a view, truly individualized suspicion is, therefore, no longer part of the probable cause determination.

3. The Link Between the Duty to Investigate and the Individualized Suspicion Mandate

This analysis of Pringle helps to demonstrate the nature of the traditional duty to investigate and its inseparable link to the idea of individualized suspicion. If the duty to investigate is no longer mandated (or is at least watered down) as a prerequisite to justifying a search or seizure, substantial social costs are incurred. Notably, the risks of aggressive investigative techniques pinning the crime on the innocent, explained earlier, rise if the need for evidence corroborating police hunches as to who did the crime is abandoned. Similarly, even if innocent persons are not convicted, many more of them might be stopped, arrested, frightened, or humiliated based upon mere hunches, stereotypes, and generalizations. Furthermore, if generalizations alone (or primarily) can suffice to create probable cause for arrest, error rates will rise because there will be no serious duty to investigate to make more informed decisions in ways that may counteract the cognitive biases reviewed above. Moreover, generalizations are far easier to come by than particularities, rendering any police obligation to explain themselves in a way that enables transparency and accountability to the courts, legislatures, and the people meaningless. “Articulable bases” become rote, readily repeatable phrases, rather than clear articulations of reasons for action in a particular case, reasons and their supporting evidence specific enough to be subject to serious critique and review.

Ultimately, I do not believe that Pringle will be read by the Court as broadly as Maclin fears—that the duty to investigate to establish truly individualized suspicion will continue to have some meat. However, Maclin has evidence on his side. I have only blind, irrationally optimistic faith to support my ever-wobbling belief.

533 See generally Taslitz, supra note 170 (explaining how aggressive police interrogation techniques can endanger the innocent).
534 See Taslitz, supra note 13 (manuscript at 26–27).
535 See id. (manuscript at 27–30).
536 See id. (manuscript at 47–48).
4. A Duty to Investigate Can Promote a Culture of Individualization Among Various Criminal Justice System Institutional Actors

There are also cultural implications from weakening the duty to investigate/individualization requirement. Accountability clearly comes most often today from the mere prospect of a suppression hearing, even if actual suppression rarely occurs.\(^\text{537}\) That fear, it has been well-documented, has also encouraged serious law enforcement training programs on Fourth Amendment mandates\(^\text{538}\)—programs arguably fostering a (perhaps flawed) police culture of respect for the individual and for hesitancy about too readily invading that individual’s privacy, property, or locomotive rights.\(^\text{539}\)

Recent empirical research suggests that there may be an even stronger prosecutor culture sprouted by the seeds of the individualized suspicion/duty to investigate pairing. Indeed, two well-respected legal scholars have gone so far as to argue that there is an “executive” exclusionary rule.\(^\text{540}\) By this they mean that prosecutors, in a way too little acknowledged, often dismiss cases or choose not to oppose suppression motions because, in their reading of the law, there was insufficient proof of an individual’s nexus to the crime.\(^\text{541}\) Partly, prosecutors are likely so convinced that the evidence will be suppressed that they choose not to waste the court’s time.\(^\text{542}\)

But prosecutors may also make these decisions based on other policy goals that accept the wisdom of a serious pre-search-or-seizure duty to investigate for individualized evidence of criminality. That may grow both from the prosecutorial advantages that a more thoroughly and early investigated case creates at trial and from prosecutors’ sense of their duty to do justice as encompassing a duty to foster constitutional ideals, not simply constitutional minima.\(^\text{543}\) Professors Marc L. Miller and Ronald F. Wright put the point thus:

\(^{537}\) See supra text accompanying notes 455–61 (discussing the exclusionary rule’s deterrent effect arising from the mere threat of suppression). The combination of a duty to investigate with a duty to explain, it is worth noting, thus implicitly also creates a “duty to evaluate” because officers who collect data but fail to evaluate its weight properly will find the evidence they seize suppressed should they evaluate the evidence poorly. This point seems straightforward and thus need not be elaborated further.

\(^{538}\) See id.; see WALKER, supra note 461, at 49–50.

\(^{539}\) See id.; see generally Andrew E. Taslitz, The Expressive Fourth Amendment: Rethinking the Good Faith Exception to the Exclusionary Rule, 76 Miss. L.J. 483 (2006) (arguing for a revamped exclusionary rule focusing on promoting a police culture of respect for constitutional rights).

\(^{540}\) Miller & Wright, supra note 455, at 137–41 (coining the term “executive exclusionary rule” and summarizing the relevant social science).

\(^{541}\) Id. at 138–39.

\(^{542}\) See id. at 139–40.

\(^{543}\) See id.; see MODEL RULES OF PROF’L CONDUCT R. 3.8(a) (2006) (“The prosecutor in a criminal case shall refrain from prosecuting a charge that the prosecutor knows is not supported by probable cause . . . .”); see generally American Bar Association, ABA STANDARDS FOR CRIMINAL JUSTICE: PROSECUTION
When the percentage of prosecutor exclusions climbs much higher than judicial exclusions, however, it could reveal various other prosecutor attitudes about the search-and-seizure rules. Prosecutors could enforce search-and-seizure doctrine more stringently than judges in selected areas to promote training of police officers on recurring problem areas. Executive exclusion also might reflect something more than a prediction about the judge’s likely decision on a future motion to exclude evidence: it could grow out of principled allegiance to constitutional ideals that the prosecutor, like the judge, swears to uphold.544

In addition to serving a sanctioning function, law serves a symbolic, communicative function.545 Constitutional law sends particularly powerful messages about how we, as a people, should “constitute” ourselves.546 Still, individuals and groups, based upon a host of factors, may interpret those messages differently.547 If Professors Miller and Wright are correct, at least some, perhaps many or even most, prosecutors see their ethical duty as aspiring to make real the highest constitutional ideals embodied in the law rather than simply to convict within the “rules of the game.”548 But if the ideals themselves are diluted or abandoned, the message heard by prosecutors may itself change, rendering the “executive” exclusionary rule a mere shadow of its former self.

Function and Defense Function 3-3.9(a) (3d ed. 1993) (“A prosecutor should not institute, cause to be instituted, permit the continued pendency of criminal charges in the absence of sufficient admissible evidence to support a conviction.”); Bruce A. Green, Prosecutorial Ethics as Usual, 2003 U. Ill. L. Rev. 1573 (engaging in an extended exploration of the meaning of the prosecutor’s duty to do justice).

Miller & Wright, supra note 455, at 139; see id. at 137–41 (summarizing supporting empirical data).


547 See Taslitz, supra note 28, at 18–31; Taslitz, supra note 105, at 2271–82.

548 See Bruce A. Green, Why Should Prosecutors “Seek Justice”?, 26 Fordham Urb. L.J. 607, 617 (1999) (“Criminal defense lawyers play close to the line. Prosecutors play in the center of the court.”). Former Attorney General and Supreme Court Justice Robert Jackson put the point even more eloquently:

The qualities of a good prosecutor are as elusive and as impossible to define as those which mark a gentleman . . . . [T]he citizen’s safety lies in the prosecutor who tempers zeal with human kindness, who seeks truth and not victims, who serves the law and not factional purposes, and who approaches his task with humility. Robert H. Jackson, Attorney Gen. of the U.S., The Federal Prosecutor, Speech Delivered at the Second Annual Conference of United States Attorneys (Apr. 1, 1940), in 24 J. Am. Judicature Soc’y 18 (1940).
V. Conclusion

This article has sought to lay out the cognitive obstacles to, and opportunities for, police getting right the individualized suspicion judgment that is at the heart of probable cause and reasonable suspicion. Perhaps this article’s most important points are that reviewing courts should demand serious, thorough explanations from officers, who must justify their search and seizure decisions, and courts should not also readily defer to conclusory assertions of police “intuition.” Although the justification requirement is already part of the legal landscape, this article suggests that a more robust version of the requirement is often desirable. That robust version must also take more seriously the command that what police must justify is particularized, not generalized, suspicion. Cognitive science thus suggests that arguments for courts giving even more deference to police search and seizure judgments than is currently true should be rejected.

Part of a more robust justification requirement, this article has also maintained, should be judicial imposition of a more vigorous police duty to investigate more thoroughly where time allows. But the courts alone cannot cure all the ills of officer cognition, nor fully take advantage of its strengths. Rather, the police must improve their training methods and operating practices to take advantage of police experience without the distorting effects of police biases.

None of these suggestions calls into question the good faith, hard work, and persistence of committed officers in protecting public safety. Instead, these suggestions stem from the reality that all humans have cognitive strengths and weaknesses, and police are, after all, just people too.