NUANCE, TECHNOLOGY, AND THE FOURTH AMENDMENT:
A RESPONSE TO PREDICTIVE POLICING AND REASONABLE SUSPICION

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ABSTRACT

In an engaging critique, Professor Arcila finds that Professor Ferguson is correct in that predictive policing will likely be incorporated into Fourth Amendment law and that it will alter reasonable suspicion determinations. But Professor Arcila also argues that the potential incorporation of predictive policing reflects a larger deficiency in our Fourth Amendment jurisprudence and that it should not be adopted because it fails to adequately consider and respect a broader range of protected interests.

INTRODUCTION

Neither doctrinal nor theoretical nuance is a strength of our Fourth Amendment jurisprudence. Consequently, though I believe Professor Ferguson correctly forecasts that predictive policing will be incorporated into Fourth Amendment law and will alter reasonable suspicion determinations, that outcome is sufficiently perilous that I will tilt against it. I have previously contended that an important deficiency in our Fourth Amendment jurisprudence is its failure to adequately consider and respect a broader range of protected interests. That same problem is likely to make the incorporation of predictive policing problematic.

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1 Andrew Guthrie Ferguson, Predictive Policing and Reasonable Suspicion, 62 EMORY L.J. 259, 263 (2012) (“[i]n its idealized form, predictive policing will impact reasonable suspicion analysis and become an important factor in a court’s Fourth Amendment calculus.”); id. at 288 (“Predictive policing technologies will . . . [be added] to the totality of circumstances from which courts can find reasonable suspicion for a seizure. . . . [These] will end up being seen as a ‘plus factor’ . . . .”); id. at 304 (“Certainly an accurate prediction of a particular crime, in a specific location, should have some effect on police officers and courts.”); id. at 312 (“Predictive policing will impact the reasonable suspicion calculus by becoming a factor within the totality of circumstances test.”); see id. at 305. But see id. at 304 (stating it is “too soon to evaluate” whether “predictive forecast [is] appropriate to consider in the totality of circumstances”).

We may be better off in the aggregate if predictive policing is excluded from the suspicion determination for numerous reasons having constitutional implications, as I will explain below. This is not a Luddite position. I do not argue for ignoring or discarding predictive policing. To the contrary, police may still take advantage of a key benefit of predictive policing—highly improved resource allocation—that results from technological advances and improved criminological research. Predictive policing’s value will be in telling someone like Officer McFadden from *Terry v. Ohio* where to invest time and observational efforts. That benefit, in and of itself, makes predictive policing invaluable to police and communities. Limiting predictive policing’s use this way, so that it does not alter the suspicion determination in the way Professor Ferguson anticipates, will ensure that predictive policing is not used as a constitutionally illegitimate, shortcut replacement to the type of patient, observant work that Officer McFadden did.

I. **DISCUSSION**

**A. Understanding Suspicion**

Professor Ferguson glosses over the distinction between probable cause and reasonable suspicion, but this distinction can be important in assessing predictive policing’s role in Fourth Amendment law. *Terry* makes reasonable suspicion sufficient to justify the seizure of a person, which is why Professor Ferguson understandably focuses upon it. But as a consequence, he makes only passing references to probable cause, such as in his description that “[i]n order to interfere with a person’s Fourth Amendment rights, law enforcement officers must have either probable cause to search or reasonable suspicion to seize an individual.” Though a defensible statement of the law, it is also an odd formulation that suggests a nonexistent binary distinction between search law and seizure law. Probable cause is not the only available justification for a search; reasonable suspicion can justify a search as well. Reasonable

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3 392 U.S. 1, 1 (1968).
4 See Ferguson, supra note 1, at 276 (“Crime may go down simply by establishing a police presence in an area.”).
5 Id. at 286 (emphasis added).
6 The *Terry* Court declared reasonable suspicion sufficient to justify a “stop and frisk,” which automatically allows one search—an investigative questioning in conjunction with the initial “stop”/seizure—and potentially a second search if the facts justify a “frisk” for weapons. See *Terry*, 392 U.S. at 1–22, 30; see also *Michigan v. Long*, 463 U.S. 1032, 1035 (1983) (“We hold that the protective search of [an automobile’s] passenger compartment was reasonable under the principles articulated in *Terry*. . . .”).
suspicion is not necessarily sufficient to seize an individual. Reasonable suspicion sometimes suffices, in the limited circumstances that *Terry* delineates. But *Terry* is a special rule. When *Terry*’s limited circumstances are not present, Fourth Amendment law reverts back to the default rule that probable cause, at a minimum, is generally required to seize an individual.8

Reasonable suspicion’s limited role is both substantive and important. *Terry*’s reasonable suspicion standard applies only to *completed felonies* or *imminent crime*9 (and its frisk authority applies only when a concern about *violence* exists10). As Professor Ferguson ably explains, predictive policing comes in many varieties, and not all of them will be sufficiently informative about imminence to satisfy *Terry*. In these instances, reasonable suspicion will not be available to justify a governmental seizure. To know whether the imminence requirement is satisfied, specific information about the police prediction will be required.

This need for specific information raises at least two difficult issues. The first issue concerns the prediction’s temporal limits.11 To know whether imminence is satisfied, litigants and courts must know the specific time period to which the prediction applies. Presumably, three months should not satisfy imminence, but will three weeks, three days, or three hours? The technological advance that predictive policing represents will pressure reluctant courts to make clearer pronouncements about what qualifies as imminence. These determinations, however, are likely to be so fact specific as to obfuscate any generally applicable guidance about imminence standards. Thus, they may fail to meaningfully limit search discretion, though better limits are sorely needed.12

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7 See infra notes 9–10 and accompanying text.
8 See United States v. Valerio, 718 F.3d 1321, 1324 (11th Cir. 2013) (“[T]he Fourth Amendment’s default rule [is] that all seizures must be supported by probable cause . . . .”).
9 See Arizona v. Johnson, 555 U.S. 323, 326 (2009) (instructing that a *Terry* stop is lawful “when the police officer reasonably suspects that the person apprehended is committing or has committed a criminal offense”); United States v. Hensley, 469 U.S. 221, 229 (1985) (holding that a *Terry* stop is justified when police encounter “a person . . . [who] was involved in or is wanted in connection with a completed felony”); *Terry*, 392 U.S. at 30 (holding that reasonable suspicion suffices under the Fourth Amendment “where a police officer observes unusual conduct which leads him reasonably to conclude . . . that criminal activity may be afoot” (emphasis added)).
10 See *Terry*, 392 U.S. at 23–24, 28–30.
11 See infra notes 44–45 and accompanying text.
12 See Ferguson, supra note 1, at 323 & nn.333–34.
The second issue concerns the specific manner in which the prediction was
generated. Outputs are only as good as the method for producing them. Thus,
as Professor Ferguson points out, assessing the legitimacy of a particular police
prediction will require peering behind the curtains of how it was produced.\footnote{See id. at 319–20.}
This will be true with regard to imminence when reasonable suspicion is
invoked to justify the seizure. Professor Ferguson notes complications that may
arise here, such as claims of a nondisclosure right due to proprietary interests,\footnote{Id. at 319.}
and I am pessimistic about achieving the transparency that should be required
before predictive policing is incorporated into Fourth Amendment law.\footnote{See infra note 45.}

Regardless of whether probable cause or reasonable suspicion is at issue,
incorporating predictive policing into the suspicion determination can raise
constitutional concerns because predictive policing can change the nature of
suspicion itself. Traditional suspicion has served as a useful protective concept
because it has encouraged searchers to think in the particularized terms that the
Fourth Amendment favors by targeting a specific individual based upon a
conglomeration of generally retroactive information, such as what was
previously said or done. These two factors—\textit{particularity} and \textit{retroactivity}\textemdash
are powerfully protective because they serve to forcefully limit search
discretion.

Predictive policing is instead \textit{general} and \textit{prospective}. It encourages
generalized targeting—\textit{not} specific to any particular individual—based upon
prospective information—a prognostication about what may occur within a
particular time period. Indeed, this is its attraction; it is why predictive policing
works differently and is so enticing.

In this realization lies a cautionary tale because incorporating predictive
policing into the suspicious determination changes the nature of suspicion from
generally being \textit{particularized and retrospective} to always being \textit{generalized and prospective}.\footnote{Note, however, the potential for predictive policing’s generalized nature to change, becoming more
particularized as technology improves. See Andrew Guthrie Ferguson, \textit{Big Data and Predictive Reasonable
Fourth Amendment history is marked by a hostility to
generalized searches. The Fourth Amendment was adopted in large measure to
ban general warrants,\footnote{Arcila, \textit{supra} note 2, at 1281–83 & nn.10–11.} and the Fourth Amendment is best interpreted as
providing protections against generalized dragnet searches.\textsuperscript{18} Predictive policing, however, can come perilously close to mini-dragnet searches of designated, possibly small areas.

The potentially saving factor is the possibility of corroboration.\textsuperscript{19} Professor Ferguson mentions several forms of corroboration, such as witnessing someone peering into parked car windows or carrying a screwdriver where there is a concern for car thefts, or carrying a large duffle bag where there is a concern about burglaries.\textsuperscript{20} The validity of incorporating predictive policing into suspicion determinations rests in large measure upon how stringent the corroboration requirement will be.

From a conceptual standpoint, predictive policing’s hallmarks of generality and prospectivity should often call for demanding corroboration requirements. In a retroactive context, corroboration confirms preexisting knowledge and the predictions that flow from it, usually in a manner that promotes particularity because a specific person is initially targeted. This dynamic sequentially improves reliability as more corroboration accumulates, which increases the degree of confidence that the proper person is being targeted for a seizure or search.\textsuperscript{21} In a prospective context, corroboration confirms predictions that flow from preexisting data but in a generalized manner in which the initial focus is not on any specific person. This dynamic can also sequentially improve reliability as more corroboration accumulates, but the unparticularized starting point corresponds with greater initial unreliability, which suggests that more corroboration should be required as a counterbalance.\textsuperscript{22} Predictive policing’s utility in targeting smaller geographic areas—and its potential to increasingly target even smaller areas\textsuperscript{23}—does not undermine this conclusion. This is because geographic specificity does not, in and of itself, contribute to validly

\textsuperscript{18} See Christopher Slobogin, Government Dragnets, 73 LAW & CONTEMP. PROBS. 107, 109–10, 143 (Summer 2010). For example, the Supreme Court in Delaware v. Prouse correctly held that it violates the Fourth Amendment for police to engage in random, suspicionless traffic stops to run license plate checks. 440 U.S. 648, 663 (1979). The Court, however, suggested that less discretionary alternatives, such as the “[q]uestioning of all oncoming traffic at roadblock-type stops” might be “one possible alternative.” Id. In dissent, Justice Rhenquist rightly mocked this “misery loves company” theory of the Fourth Amendment. Id. at 664 (Rhenquist, J., dissenting).

\textsuperscript{19} See Ferguson, supra note 1, at 303 (explaining that predictive policing “must be corroborated by direct police observation”); id. at 307 (“The key remains the observations that corroborate the tip.”).

\textsuperscript{20} Id. at 261, 309, 314.

\textsuperscript{21} Id. at 287 (noting the “individualized” requirement for suspicion).

\textsuperscript{22} See id. at 307 (“[T]he information in the computer is generalized, and that fact makes it less reliable.”).

\textsuperscript{23} See id. at 303, 311–12.
establishing probable cause or reasonable suspicion. Fourth Amendment particularity is not a geographic concept. Thus, more demanding corroboration requirements should generally be imposed because otherwise predictive policing poses a real danger to Fourth Amendment protections, especially with regard to the particularity requirement that is fundamental to restraining search discretion. Consequently, we will be better off—and Fourth Amendment protections will be better respected—if courts generally reject Professor Ferguson’s contention that when predictive policing is at issue “police may actually need less corroboration in their observations.”

Imposing more demanding corroboration requirements in the context of predictive policing will be difficult because current Fourth Amendment corroboration requirements are already lax. This problem can be seen in Illinois v. Gates and Alabama v. White, two Supreme Court cases that Professor Ferguson discusses. In Gates, which concerns probable cause, as well as in White, which concerns reasonable suspicion, the Court was insufficiently demanding with regard to corroboration. In each case, the Court deemed there to be adequate corroboration while ignoring crucial temporal considerations. In Gates, inadequate corroboration existed without knowing whether the Gates were driving directly back to their Chicago-area home from Florida. But one cannot learn from the record when police sought the search warrant for the Gates’ home, and thus it is impossible to determine the Gates’ location at that moment on their return route. In the absence of this information, and as the dissenting Justices suggested, the Gates could have been driving anywhere in northern Florida or to any other location in the country, and either possibility would have materially undermined a probable cause finding. Similarly, adequate corroboration was lacking in White until it

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24 See id. at 292 (agreeing that suspicion requires “individualization, corroboration, [and] particularized detail”); see also id. at 306, 310.
25 See id. at 305 (“[A] predictive policing ‘tip’ is not particularized to an individual.”).
26 Id. at 380. To be fair to Professor Ferguson, I acknowledge that he made this assertion while speaking about predictive policing in a particular context—as applied to a specific geographic area—rather than generally. But because I fear that others will not be as careful as he is, I think it useful to make my point generally.
29 Ferguson, supra note 1, at 289–91.
30 See 462 U.S. at 230.
31 496 U.S. at 326–27.
32 See id. at 331; Gates, 462 U.S. at 243–46.
33 462 U.S. at 292 & n.3 (Stevens, J., dissenting).
34 See id.; see also id. at 274 (Brennan, J., dissenting) (joining Justice Stevens’s dissent).
was known whether White was driving to Dobey’s Motel, but police stopped her car before it could arrive there. Though the majority took shelter in her driving “the most direct route to Dobey’s Motel,” a decision truly respectful of Fourth Amendment protections would have required police to wait to see if she actually arrived there, particularly because such a delay would have been apparently risk-free given the facts of the case.

Predictive policing might fundamentally undermine the Fourth Amendment’s protections as historically and currently conceived. This risk is especially acute if predictive policing is incorporated into suspicion determinations without adequate sensitivity to many nuances, such as the ones Professor Ferguson identifies, as well as others, such as the distinction between our traditional suspicion models, which are retrospective and particularized, and predictive policing’s generalized and prospective suspicion paradigm. Accepting the legitimacy of predictive policing may require more than accepting an evolving Fourth Amendment. It may require sufficient agreement that we want a new Fourth Amendment.

B. Likelihood of Insufficient Safeguards

The difficulty in developing a new Fourth Amendment that incorporates predictive policing is that, though we can conceivably fashion it to provide levels of protection commensurate with our history and traditions, properly dealing with the variety of predictive policing programs and the varying contexts to which they are applied will require an attention and responsiveness to nuance that Fourth Amendment law has not been able to achieve and is not well placed to ensure. It will also require an expertise that lawyers are unlikely to have or be able to master. While legislation provides an alternate route for assuring Fourth Amendment protections, I am not optimistic about that process. Thus, though predictive policing should be approached cautiously and with care, I fear that goal is unlikely to be met.

Professor Ferguson does an admirable job of explaining predictive policing’s nuances, and of acknowledging many of the safeguards that should be implemented in response to it. As Professor Ferguson explains, predictive

35 496 U.S. at 327.
36 Id.
37 This is a point on which Professor Ferguson and I appear to agree. See Ferguson, supra note 1, at 265 (suggesting that predictive policing should not “unthinkingly” be applied in new contexts).
38 Id. at 314–20.
39 Id. at 314–16, 319.
policing is a unifying term that masks extensive variety in the data and methodologies used, types of crime considered and predicted, and reliability of results. Consequently, I certainly agree with him that predictive policing programs should not “unthinkingly” be applied to new contexts. 40 Unfortunately, I predict that this is likely to occur, and also that it is unlikely that the necessary safeguards will be adequately implemented.

Take, for example, the necessity of transparency with regard to predictive policing. 41 Professor Ferguson suggests that transparency might be addressed “outside the courtroom,” such as through “[i]ndependent oversight boards, audits, and other methods to test and retest the data collection and analysis.” 42 While a helpful suggestion, this will not displace both an interest and need during litigation for discovery about the applicable predictive policing system and its results. However, abundant reasons exist to be pessimistic about the adequacy of either nonjudicial or judicial mechanisms to provide sufficient oversight and quality control over predictive policing. For example, given the technological complexity of predictive policing, the potential size of the enterprise, and a powerful free-market ethos, there is every reason to expect private business to enter the fray, looking to profit from governmental entities’ desire to benefit from this new technology. Already, private enterprise is at the forefront of other big data exercises. As private enterprise enters the field, claims of proprietary information will increase, as Professor Ferguson acknowledges. 43 As this occurs, the adequacy of oversight—such as to analyze code, algorithms, and underlying data—seems quite unlikely unless a powerful mechanism exists for assuring it, such as guaranteeing access to the underlying information by statute.

Legislation could also have an important role with regard to predictive policing in other ways. For example, the degree to which predictive policing is usefully incorporated into suspicion determinations depends upon the validity of the data upon which it is based, 44 and upon the likelihood that the resulting prediction is correct. Legislation could be particularly useful in identifying the required confidence levels and/or error rates that should be acceptable in

40 See supra note 37.
41 Ferguson, supra note 1, at 316–20.
42 Id. at 320.
43 See supra note 14 and accompanying text.
44 Ferguson, supra note 1, at 317–18.
predictive policing. This is particularly so because existing law is extremely deficient in these respects.\textsuperscript{45}

Professor Ferguson could advance his predictive policing project by, for instance, proposing model legislation. Unfortunately, all such efforts might be for naught, as the widespread agreement necessary to implement strong legislation seems remote given the propensity to sacrifice privacy for potential security.

CONCLUSION

For several years, struggles concerning technology have marked the Supreme Court’s Fourth Amendment docket, and Professor Ferguson’s admirable work on predictive policing suggests that this struggle will continue. Technological progress is tantalizing in part because of the increased efficiency it promises. The debate over predictive policing again raises the issue of whether the Fourth Amendment properly requires some law enforcement inefficiency to safeguard constitutional values and, if so, how to provide those protections.

\textsuperscript{45} For example, Fourth Amendment law provides virtually no safeguards over data entry due to the good-faith doctrine and the exclusionary rule’s emasculation. See Herring v. United States, 555 U.S. 135, 140–43, 146–47 (2009); id. at 153–57 (Ginsburg, J., dissenting). Fourth Amendment law appears similarly weak with regard to confidence levels and/or error rates. See Mich. Dep’t of State Police v. Sitz, 496 U.S. 444, 454–55 (1990) (accepting a 1.6% success rate for a dragnet search, and approvingly commenting upon search success rates of 0.12%, 0.5%, and approximately 1%).