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CONSTITUTIONAL SHAPESHIFTING: GIVING THE FOURTH AMENDMENT SUBSTANCE IN THE TECHNOLOGY DRIVEN WORLD OF CRIMINAL INVESTIGATION

Gerald S. Reamey[†]

For the first hundred years of the Fourth Amendment's life, gains in the technology of surveillance were modest. With the advent of miniaturization and ever-increasing sophistication and capability of surveillance and detection devices, the Supreme Court has struggled to adapt its understanding of "search" to the constantly evolving devices and methods that challenge contemporary understanding of privacy. In response to surveillance innovations, the Court has taken varying positions, focusing first on property-based intrusions by government, then shifting to privacy expectations, and, more recently, resurrecting the view that a trespass to property can define search.

This article surveys this constitutional odyssey, noting the inadequacies of each phase's approach. It then suggests a reconceptualization of search doctrine better designed to align constitutional protection with the moving target of investigative techniques. The view of privacy, central to the Fourth Amendment, is recast as a broader, and more representative, normative component rather than a simple risk-assessment. Investigative motive or intent, which only intermittently has played a part in the definition of search, is proposed as a constant factor within search analysis. And trespass doctrine, only recently back from the dead, is broadened and refocused to emphasize invasiveness more generally. With candid recognition of the weaknesses and difficulties inherent in all of these modes of analysis, the article makes the case for taking up the hard

[†] Professor of Law, St. Mary's University School of Law. I am grateful to the West Virginia Law Review for inviting me to participate in its 2017 symposium, Evolving Investigative Technologies and the Law. My preparation to speak, listen, and discuss this important topic prompted me to reconsider ways in which law can best adapt to a rapidly-changing investigative landscape without doing violence to the principles of the Fourth Amendment. This Article reflects my thinking on some relevant aspects of constitutional law and what it means to conduct a "search." I was aided in the preparation of this Article by my research assistants, Alexandra Zepeda and Raymond Saldana, and by my assistant, Ms. Aurora Torres. I also owe a debt of gratitude to generations of law students who have helped me perceive the fault lines in Fourth Amendment jurisprudence merely by voicing their discontent with the results and reasoning of bedrock opinions in which the Supreme Court has shaped, and sometimes shapeshifted, the law of search and seizure.

job of conforming the language, tradition, and popular expectations of constitutional protection to the realities of an ever-changing surveillance landscape.

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INTRODUCTION

Dante Carlo Ciraolo had erected two privacy fences around his yard, a six-foot high outer fence and a ten-foot high inner fence, to shield his marijuana plants from the view of persons who might wander by his residence. He failed, however, to protect against aerial surveillance, perhaps because the possibility that someone who happened to be flying overhead in an airplane would look down into his yard, identify growing marijuana plants, and report the discovery to the police, seemed too remote. His expectation may have been realized had

^{1.} California v. Ciraolo, 476 U.S. 207, 209 (1986).

^{2.} *Id.* Ciraolo's property lay in a sparsely inhabited area that was densely wooded except for a few small clearings. It seems unlikely that someone flying in the vicinity would happen to see the plants or be able to identify them from the altitude of navigable airspace.

it not been for an anonymous informant who telephoned the Santa Clara, California, Police Department and reported that Ciraolo was growing marijuana in his backyard.³

Two officers from the agency were dispatched to investigate without requesting consent to enter the yard or by securing a search warrant for the premises,⁴ but by flying over the property in a private airplane at an altitude of about 1,000 feet.⁵ Peering down from that height, the officers, who were trained in marijuana recognition, saw the plants growing in a plot within the yard.⁶

In a decision that has confounded and frustrated generations of law students since its publication in 1986, the Supreme Court of the United States in *California v. Ciraolo*⁷ considered what it means for the government to "search" the property of a citizen. This core question for Fourth Amendment inquiry is rooted in the amendment's prohibition against unreasonable "searches" and "seizures." Unless the government engages in a "search"—which the constitutional text does not define the Fourth Amendment does not apply. For defendants like Mr. Ciraolo, if there is no "search," there can be no Fourth Amendment violation that would lead to the suppression of incriminating evidence.

At first blush, readers of the Court's opinion may not understand why there is any question about whether the Santa Clara officers were conducting a search. It seems so clear, in the common understanding of what "search" means, that they were "searching" for marijuana plants on the Ciraolo property

California v. Ciraolo, Oyez, https://www.oyez.org/cases/1985/84-1513 (last visited May 3, 2018).

- 3. See Ciraolo, 476 U.S. at 209.
 - 4. Id.
 - 5. Id.
 - 6. Id. The officers photographed the plants using a standard 35mm film camera. Id.
 - Id. at 207.
- 8. See Id. at 217-18 (Powell, J., dissenting) (explaining that the Fourth Amendment protects against unreasonable "searches," which are determined by intrusion on an individual's reasonable expectation of privacy).
- 9. See Joshua Dressler, Alan C. Michaels & Ric Simmons, Understanding Criminal Procedure, Volume 1: Investigation § 6.01[A] (7th ed. 2017).
- 10. The Fourth Amendment contains the only reference in the United States Constitution to the word "search," a reference that is not elaborated on or explained in the amendment's single sentence. See U.S. Const. amend. IV. In its entirety, the Fourth Amendment reads as follows:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

U.S. CONST. amend. IV.

11. See Dressler et Al., supra, note 9, at 65 ("[I]f a court determines that no search (and no seizure) has occurred, Fourth Amendment analysis immediately ceases.").

and that they were doing so very deliberately, and probably at some expense to their agency.¹² The Court was limited, however, in its legal application of the word "search" by its prior groundbreaking opinion in *Katz v. United States*.¹³

In *Katz*, the Court rejected its previous reliance on physical trespass¹⁴ to determine whether the government is searching,¹⁵ and established an analytical construct focused instead on whether the defendant's expectation of privacy has been violated by governmental action.¹⁶ Writing for the majority, Justice Stewart famously explained that "the Fourth Amendment protects people—and not simply 'areas'—against unreasonable searches and seizures," and that "the reach of that Amendment cannot turn upon the presence or absence of a physical intrusion into any given enclosure."¹⁷ However laudatory this conceptual shift may be, "expectation analysis" fails to clearly delineate which expectations are reasonable, and which are not. By eschewing the use of trespass as the touchstone of a "search," and substituting expectation of privacy in its place, the Court took upon itself the burden of case-by-case determinations of whether a person raising a claim of unlawful search had both a subjective and objective expectation of privacy at the time of the intrusion.

Had the officers in *Ciraolo* trespassed onto the suspect's property, the case might have been simpler for the majority, given that it would have been easier to conclude that Mr. Ciraolo's expectation of privacy was reasonable.¹⁸

^{12.} Assuming that the Santa Clara Police Department did not own an airplane when this surveillance occurred, the agency would have been required to charter a piloted aircraft for this purpose. Even if the Department used its own plane, its expenses would have included a pro-rata share of the purchase price and maintenance for the aircraft, as well as fuel for the flight, storage fees for the aircraft, possible landing fees, and the not inconsiderable cost of a pilot, along with the salaries of the officers engaged in the surveillance. According to a National Institute of Justice study, "fixed-wing light aircraft generally cost between \$60,000 and \$130,000 to purchase and \$50 per hour to fuel and maintain." See The National Institute of Justice, https://www.nij.gov/topics/lawenforcement/operations/aviation/ pages/types-of-aircraft.aspx#fixed-wing (last visited Apr. 7, 2018).

^{13.} Katz v. United States, 389 U.S. 347 (1967).

^{14.} Prior to *Katz*, trespass was required in order for the government's conduct to constitute a search. *See* Russell L. Weaver, *The Fourth Amendment and Technologically Based Surveillance*, 48 Tex. Tech. L. Rev. 231, 234-35 (2015) ("[A]bsent a trespassory intrusion . . . the Fourth Amendment was inapplicable.").

^{15.} See 389 U.S. at 353. The Court seemed to abandon the trespass doctrine completely in analyzing whether a search had occurred: "We conclude that the underpinnings of Olmstead and Goldman have been so eroded by our subsequent decisions that the 'trespass' doctrine there enunciated can no longer be regarded as controlling." Id.; see also Tracey Maclin, Katz, Kyllo, and Technology: Virtual Fourth Amendment Protection in the Twenty-First Century, 72 Miss. L.J. 51, 61 (2002) (noting that Katz rejected physical intrusion or trespass as a prerequisite for Fourth Amendment protection).

^{16.} See 389 U.S. at 353.

^{17.} Id.

^{18.} By the time the Court considered Ciraolo, the trespass doctrine had been abandoned as a means to determine whether the government's action was a "search."

However, there was no physical trespass, and the Court was left trying to determine whether a "visual trespass" into the home's "curtilage" might have violated Mr. Ciraolo's reasonable expectation of privacy. In this determination, the Court grappled with the terrible difficulties that expectation analysis presents. It was no longer possible after *Katz* to rely on trespass alone in deciding whether a "search" had occurred, and the Court found itself trying to sort out whether Ciraolo had an actual, subjective expectation of privacy and, if so, whether that expectation was objectively reasonable, a much more difficult question than whether a physical intrusion had occurred.

Ciraolo's erection of double privacy fencing was clearly intended to keep prying eyes out of the backyard and away from the marijuana crop.²¹ That much the Court accepted, at least with respect to "normal sidewalk traffic."²² But not *all* visual access to the property was blocked, and as the Court pointed out, "[n]or does the mere fact that an individual has taken measures to restrict some views of his activities preclude an officer's observations from a public vantage point where he has a right to be and which renders the activities clearly visible."²³

The Court seemed to conclude that because the officers were flying in-

However, had the case involved a physical trespass, it would have been a shorter logical step to the conclusion that any expectation of privacy he claimed was reasonable. *Compare United States v. Jones*, 565 U.S. 400, 406 n. 3 (2012) (holding that where the government obtains information by physically intruding on a constitutionally protected area, a search has "undoubtedly occurred") with Katz v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring) (stating that reasonable expectation of privacy analysis is a "twofold requirement" requiring both a subjective expectation of privacy and that the expectation be one that society is prepared to accept as reasonable).

- 19. The State accepted that Ciraolo's backyard was within the "curtilage" of the home, the area intimately associated with the domestic activities of the residence. See Ciraolo, 476 U.S. at 212-13. Although the Court in Katz rejected the notion of constitutionally protected "areas" as defining Fourth Amendment protection, Katz, 389 U.S. at 353, the curtilage of a "house" is generally considered to be within the protection of the Fourth Amendment. See DRESSLER ET AL., supra, note 9, at § 5.03 (concluding that "house" constitutionally includes the curtilage).
- 20. See Ciraolo, 476 U.S. at 217 (Powell, J., dissenting) ("[R]espondent's expectation of privacy in the curtilage of his home, although reasonable as to intrusions on the ground, was unreasonable as to surveillance from the navigable airspace.").
- 21. See id. at 211 ("Clearly—and understandably—respondent has met the test of manifesting his own subjective intent and desire to maintain privacy as to his unlawful agricultural pursuits.").
- 22. See id. Chief Justice Burger, author of the majority opinion in Ciraolo, observed that it was "not entirely clear" whether a citizen or policeman "perched on the top of a truck or a two-level bus" and looking into the yard despite the fencing would defeat Ciraolo's subjective expectation of privacy. See id. at 211-212. But in deciding the case, it hardly seemed to matter because Ciraolo presumably would not have had an objectively reasonable expectation of privacy, whatever level of privacy he may have thought his fencing would afford.
 - 23. Id. at 213.

"public navigable airspace,"²⁴ their observations of the activity within Mr. Ciraolo's yard were no more intrusive and no more a Fourth Amendment "search" than if the officers had walked past the yard and Ciraolo had only the visual protection of a chain-link fence.²⁵ The frustration experienced by many law students reading Chief Justice Burger's opinion on this point often stems from the obvious investigative intent the officers demonstrated. The Court decided that the deliberate effort to identify marijuana was "irrelevant" in deciding whether a search had occurred,²⁶ despite Ciraolo's considerable measures to maintain a private backyard. After all, the Court explained, any member of the public flying over the property could have "glanced" down and seen what the officers saw.²⁷ This explanation rings hollow with many who encounter this opinion for the first time. Would a passenger on a commercial flight, or one flying in a private aircraft for recreation, really be able to identify individual plants at a "glance" from an altitude of 1,000 feet?²⁸

While the *Ciraolo* Court added to our understanding of what constitutes a "search" for Fourth Amendment purposes, the case did not involve any high-technology surveillance techniques. Rather, the novelty derives from the use of an airplane as a platform for observation, because aircraft technology already had been in use for nearly eighty years.²⁹ Moreover, fixed- and rotary-wing aircraft, jets and propeller-driven planes, were widely used for commercial, scientific, and recreational purposes.³⁰ Today, an unmanned aircraft—a drone—might be used to do the same job.³¹ Based on the Court's holding in

^{24.} See id.

^{25.} See id. at 213-14 (holding that measures taken to restrict some views of a person's activities do not preclude an officer's observations from a public vantage point where he has a right to be and which renders the activities clearly visible).

^{26.} See id. at 213.

^{27.} See id. at 213-14.

^{28.} The Court cited no empirical evidence that such sightings occur frequently, or even occasionally, much less that sightings are reported by the public for police investigation. See id.

^{29.} The first flight of the Wright brothers took place on December 17, 1903. See 1903 – The First Flight, WRIGHT BROS. NAT'L MEM'L, https://www.nps.gov/wrbr/learn/historyculture/thefirstflight.htm (last updated Apr. 14, 2015). The use of aircraft for observation dates from at least WWI. See The War in the Air – Observation and Reconnaissance, http://www.firstworldwar.com/airwar/observation.htm (last visited Apr. 7, 2018).

^{30.} The number of active pilots in the United States reached its peak in the 1980s at more than 827,000 before beginning to decline. See New Report Shows Decline in General report-shows-decline-in-general-aviation; THE BIRTH OF COMMERCIAL http://www.birthofaviation.org/birth-of-commercial-aviation (last visited Apr. 7, 2018); How planes there in the world right now?, THE https://www.telegraph.co.uk/ travel/travel-truths/how-many-planes-are-there-in-the-world (last visited Apr. 7, 2018).

^{31.} See Surveillance Drones, ELEC. FRONTIER FOUND., https://www.eff.org/issues/

Ciraolo, that too would presumably not be a search. The use of more sophisticated devices to conduct criminal investigation thus raises interesting, and difficult, questions about the application of the Fourth Amendment to these new "searches."

The surveillance "technology" used by the police in Ciraolo presented the Court with a glimpse into a future of constitutional decision making in which the landscape of Fourth Amendment doctrine would constantly shift as investigative methods became increasingly sophisticated. When Katz was decided in 1967, the trespass doctrine had proven itself inadequate as an analytical method to deal with electronic eavesdropping and other forms of surveillance made possible by advances in technology. The successor to trespass, reasonable expectation of privacy, offered increased capacity to deal with these changes by focusing on the view of the person being surveilled rather than on whether the government physically invaded an area in which the person had a property interest. But by 2001, the Court was confronted with a search by a thermal imaging device, a piece of technology that permitted law enforcement to "see" behind brick walls without physically intruding.³² Sensing that its expectation analysis would prove insufficient to cope with surveillance devices that are now in "general public use" 33 the Court continued to rely on its: holding in Katz until 2012 when, perhaps in frustration, it revived the trespass doctrine to operate alongside expectation of privacy.³⁴ The patchwork nature of the Court's approach to the "search" question demonstrates a need to think more broadly about the fundamental questions of the Fourth Amendment, and to reformulate the approach that now serves us poorly. After reviewing the winding path that has led the Court to its current view, I will suggest an architecture for a Fourth Amendment understanding that will better withstand the inevitable onslaught of rapid technological change. I argue not for brightline rules, but for a more normative understanding of expectation of privacy coupled with a recognition that the investigative intent or motive of law enforcement matters. An objective evaluation of invasiveness without the current use of trespass doctrine will allow courts to more neatly conform the protections of the Fourth Amendment with the expectations of the people it is meant to protect.

I. LAW CHASING TECHNOLOGY

The Supreme Court has struggled to find a single, overarching mode of analysis that faithfully accounts for the 18th Century language and concepts of

surveillance-drones (last visited Apr. 7, 2018).

^{32.} See Kyllo v. United States, 533 U.S. 27, 29 (2001).

^{33.} See id. at 34.

^{34.} See United States v. Jones, 565 U.S. 400, 409 (2012).

the Fourth Amendment while recognizing the ever-changing investigative techniques of the 21st Century.³⁵ In order to appreciate the increasing gap between how the Framers conceived of a governmental "search" and what that term encompasses today, it is instructive to consider just a few of the ways in which investigation by law enforcement has changed.³⁶

A. A New Perspective—"Perspective Enhancing" Surveillance

The Ciraolo case serves as a useful example of a technology (flight) that is used in aid of criminal investigation. Unlike other technological devices that enhance the senses,³⁷ the airplane in Ciraolo was used to enhance the officers' perspective, permitting them to see what they could not have seen otherwise.³⁸ A ladder, or Chief Justice Burger's two-story bus,³⁹ would have accomplished the same thing, as would the modern drone. Thanks to miniaturization, the enabling advance that makes virtually all of modern surveillance equipment possible and effective, high-definition cameras attached to small drones provide law enforcement officers an easily accessible enhanced perspective—a perspective that previously was costly or clumsy.⁴⁰ Unlike the aircraft used for a single purpose in Ciraolo, miniature unmanned aerial vehicles (UAVs) may soon be available to every officer.⁴¹ Amazon has acquired a patent for just such a device that could be carried by patrol officers and deployed during an

^{35.} See Maclin, supra, note 15, at 51-52 (arguing that the increasing use of technology presented Fourth Amendment questions not imagined by the Framers); Weaver, supra, note 14, at 233 (stating that the Supreme Court's Fourth Amendment jurisprudence has not kept pace with advances in technology).

^{36.} Of course, it is also important to bear in mind that there were no organized police forces as we know them when the Fourth Amendment was ratified. Searches by agents of the government certainly occurred, and it is reasonable to believe that the abuses of these agents were the chief harm against which the Fourth Amendment was directed. See Stanford v. Texas, 379 U.S. 476, 481-83 (1965). Modern law enforcement officers of all stripes are at least roughly analogous to the government agents at the time of the framing, notwithstanding the vast differences in organization, purpose, training, and methods that exist. See Olivia B. Waxman, How the U.S. Got Its Police Force, TIME, (May 18, 2017), http://time.com/4779112/police-history-origins/.

^{37.} For an overview and critique of sense-enhanced searches, see generally David E. Steinberg, Sense-Enhanced Searches and the Irrelevance of the Fourth Amendment, 16 WM. & MARY BILL RTs. J. 465 (2007).

^{38.} See Ciraolo, 476 U.S. at 211 (finding that a 10-ft fence shielded yard from normal sidewalk traffic but not from someone perched on "the top of a truck or a two-level bus").

^{39.} See id.

^{40.} See Surveillance Drones, ELECTRONIC FRONTIER FOUNDATION, https://www.eff.org/issues/surveillance-drones (last visited Apr. 7, 2018).

^{41.} See Bambi Majumdar, Flying body cameras: The next wave of police technology, MULTIBRIEF, (Nov. 9, 2016), http://exclusive.multibriefs.com/content/flying-body-cameras-the-next-wave-of-police-technology/law-enforcement-defense-security.

encounter to give the officer a view from a different perspective.⁴² While obviously useful to police officers, this "enhanced perspective" seems potentially far more invasive than the relatively primitive expedient of climbing ladders or chartering an aircraft.

1. Pervasive Surveillance

Developing surveillance technology is pervasive and enveloping, rather than directed toward an individual. ShotSpotter, a gunshot detection system, uses a combination of audio and other sensors positioned throughout a city or neighborhood to detect gunshots, fix their location of origin, and alert law enforcement.⁴³ While the developers of the system deny that it is used to monitor conversations or sounds other than the distinctive report of a firearm being discharged,⁴⁴ would the incidental capture of incriminating conversation intended to be private be considered a "search" as it was in the *Katz* case, or would this be another example of enhanced perspective, as in *Ciraolo*?

Pervasive surveillance also can be visual, and not only by satellite observation. Images transmitted from high-definition cameras mounted on fixed-wing aircraft, and potentially on helicopters or drones, provide law enforcement with pictures of the movement of all persons and vehicles over a very large area—an area the size of a city—for an extended period of time.⁴⁵ Undoubtedly helpful in tracking persons fleeing the scene of a crime, or in providing protective surveillance of an event or site, or even in solving crimes after the fact, this technology allows aerial observation of not just a single piece of property, as in *Ciraolo*, but hundreds of residences and buildings, as well as people and vehicles, simultaneously.⁴⁶ Nonexistent in 1986 when *Ciraolo* was decided, this new surveillance technology may trigger privacy concerns by the Supreme Court that were not fully considered thirty years ago.

Justices Sotomayor and Alito, concurring in *United States v. Jones*, ⁴⁷ a GPS tracking case, expressed such concern over a non-trespassory, long-term surveillance of the movements of a suspect's vehicle. ⁴⁸ Unlike the *Jones*

^{42.} See id.

^{43.} See Hannah Gold, ShotSpotter: Gunshot Detection System Raises Privacy Concerns on Campuses, THE GUARDIAN, (July 17, 2015), https://www.theguardian.com/law/2015/jul/17/shotspotter-gunshot-detection-schools-campuses-privacy.

^{44.} See id.

^{45.} See Craig Timberg, New Surveillance Technology Can Track Everyone in an Area for Several Hours at a Time, The Washington Post (Feb. 5, 2014), https://www.washingtonpost.com/business/technology/new-surveillance-technology-cantrack-everyone-in-an-area-for-several-hours-at-a-time/2014/02/05/82f1556e-876f-11e3-a5bd-844629433ba3_story.html?utm_term=.3dd741040b8c.

^{46.} See id.

^{47.} United States v. Jones, 565 U.S. 400, 401 (2012).

^{48.} See id. at 415-16 (Sotomayor, J., concurring); id. at 430-31 (Alito, J., concurring).

majority, Sotomayor and Alito, joined by Justices Kagan, Breyer, and Ginsburg, accepted that such surveillance constitutes a "search" within the meaning of the Fourth Amendment. ⁴⁹ Justice Scalia, writing for the majority, did not reject the possibility that a prolonged surveillance not involving trespass would come within the reach of Fourth Amendment protection. ⁵⁰ In considering whether placing the GPS tracking device on Jones's car and tracking it for an extended period constituted a search, Justice Scalia observed, "[i]t may be that achieving the same result through electronic means, without an accompanying trespass, is an unconstitutional invasion of privacy, but the present case does not require us to answer that question." ⁵¹

As technological advances allow surveillance to become easier, cheaper, more reliable, and more thorough, 52 the simple analysis of older cases like *United States v. Knotts*, 53 a "beeper" tracking case, will become increasingly inadequate to address the threshold question of what is a "search." While *Knotts* held that traditional "tailing" and observing from a public vantage point may not have impinged on a suspect's reasonable expectation of privacy, the kind of pervasive, continuous, long-term surveillance that is now readily available to law enforcement presents wholly different, and far greater, privacy issues.

2. The "Third-Party" Doctrine

Like visual observation, eavesdropping is an ancient surveillance technique that has been expanded and enhanced by technology. In the days prior to the surveillance revolution, including the time of the adoption of the Fourth Amendment, surreptitiously listening to a neighbor's conversation was employed as an information-gathering technique.⁵⁴ This method, which surely must have been used since the earliest development of speech in humans, was well known to the authors of our constitutional guarantee against unreasonable search.⁵⁵ That guarantee was limited, then as now, by the doctrine that what is

^{49.} See id. at 414-31.

^{50.} See id. at 412.

⁵¹ *ld*

^{52.} See id. at 414-16 (Sotomayor, J., concurring) (writing that large amounts of intimate information are available to government at "relatively low cost" by GPS monitoring).

^{53.} United States v. Knotts, 460 U.S. 276 (1983).

^{54.} See JOHN L. LOCKE, EAVESDROPPING: AN INTIMATE HISTORY 19 (2010) ("The urge to eavesdrop is a natural disposition, one that evolved anciently, develops early, is expressed universally, confers a number of important benefits, and has a long history, dating back to the Middle Ages."); Dave Wilton, Eavesdrop, (June 11, 2006), http://www.wordorigins.org/index.php/eavesdrop (discussing the medieval origins of the word "eavesdrop").

^{55.} See LOCKE, supra, note 54, at 33 (writing that ancient Roman comedies of Plautus and Terence portray at least ten bouts of eavesdropping per play and that "[t]hese comedies

knowingly and voluntarily exposed to the sight or hearing of a third person cannot be considered "private." This notion that a privacy expectation is *per se* unreasonable if speech, conduct, or other forms of incriminating evidence are willingly exposed, may have been suited to an age in which it was relatively easy for every person to gauge the likelihood that others would overhear or observe, but those days have passed. As Justice Sotomayor acknowledged in her concurring opinion in *Jones*,

More fundamentally, it may be necessary to reconsider the premise that an individual has no reasonable expectation of privacy in information voluntarily disclosed to third parties. This approach is ill suited to the digital age, in which people reveal a great deal of information about themselves to third parties in the course of carrying out mundane tasks. ⁵⁸

When the Supreme Court in *Katz* adopted "reasonable expectation of privacy" to replace trespass analysis to hold that surreptitious eavesdropping by the government was a search, it acknowledged the simplistic notion of trespass was an unsatisfactory way to deal with more modern surveillance methods. While the expanded definition of "search" enhanced the Court's ability to deal with more than physical intrusion, it presented its own challenges from its adoption. 60

The placing of an electronic "bug" or eavesdropping device on the outside of a telephone booth in order to hear one side of a conversation seems by today's standards, a method from a hundred years ago, although it actually was deployed in the mid-1960s against Mr. Katz.⁶¹ Indeed, the telephone booth to

- 56. See Katz v. United States, 389 U.S. 347, 351 (1967); see also Paul Ohm, The Fourth Amendment in a World Without Privacy, 81 MISS. L.J. 1309, 1327-28 (2012) (writing that "knowing exposure" has been used to take observations from airplanes and helicopters outside the Fourth Amendment).
- 57. See id. at 1130 (noting that few legal scholars find anything kind to say about the third-party doctrine).
- 58. Jones, 565 U.S. at 417 (Sotomayor, J., concurring); see Adam R. Pearlman & Erick S. Lee, National Security, Narcissism, Voyeurism, and Kyllo: How Intelligence Programs and Social Norms Are Affecting the Fourth Amendment, 2 Tex. A&M L. Rev. 719, 743 (2015) (noting Justice Sotomayor's warning that persons providing private information to third parties do not necessarily waive their desire for privacy).
- 59. See Katz, 389 U.S. at 352-53 (holding that whether electronic listening and recording of conversation is a search cannot turn on whether the device happened to physically intrude into any given enclosure).
 - 60. See DRESSLER ET AL., supra note 9.
- 61. See Katz, 389 U.S. at 348 (stating that FBI agents attached an electronic listening and recording device to the outside of the public telephone booth from which Katz made his

make it clear that eavesdropping was 'in' over two thousand years ago, and it has surely stayed in."). Locke cites an example of eavesdropping in literature that slightly predates American independence and the adoption of the language of the Fourth Amendment. See id. (citing a French novel by Marivaux published in about 1714 in which a young man eavesdrops on a conversation between his lover and a rival on multiple occasions).

which the "bug" was attached is an item scarcely known to those born during the age of the cell phone and smart phone. Sense-enhancing and perspective-enhancing devices that were not imagined at the time of *Katz* now permit the gathering of information from conversation, data storage, internet usage, text messaging, location services, and so much more, all by accessing the miniature computer/transceiver that has replaced telephones, letters, calendars, and file cabinets. If all of these "effects" are to be protected by the Fourth Amendment, the concept of a "search" must account for the many ways in which that information may be acquired, as well as for shared beliefs about what is "private."

3. When High-Tech Enters Sacred Spaces by Sense-Enhancement

Gathering information from cars being driven on public streets or conversations occurring in public places presents relatively easy constitutional questions, particularly if the means of surveillance allows collection of only limited information about what has been exposed to public sight or hearing. Collecting evidence from within areas previously considered to be constitutionally protected,⁶² and especially from within the home, the most sacred of those places,⁶³ more clearly implicates the prohibition on unreasonable searches of "houses" contained within the Fourth Amendment and is therefore less constitutionally problematic.⁶⁴ When high-tech devices, and sometimes even very low-tech devices, are used to learn what is occurring behind the walls of a residence or commercial structure, the inclination of the Supreme Court has been to label the use of the devices a search.⁶⁵

Justice Antonin Scalia became the Supreme Court's *de facto* designated expert on what constitutes a search, particularly when that search involved the home. He first addressed the implications of surveillance by technology in *Kyllo v. United States*, ⁶⁶ a case in which the police used what seems now to be a relatively crude thermal imaging device positioned on public property to determine that an unusually high level of heat was originating in particular parts of Danny Kyllo's residence. ⁶⁷ That observation corroborated Agent

calls).

^{62.} See Katz, 389 U.S. at 352 (rejecting concept that particular places are "constitutionally protected").

^{63.} See Florida v. Jardines, 133 S.Ct. 1409, 1414 (2013) (holding that "when it comes to the Fourth Amendment, the home is first among equals").

^{64.} See U.S. CONST. amend. IV; DRESSLER ET AL., supra note 9.

^{65.} See, e.g., Kyllo v. United States, 533 U.S. 27 (2001) (holding that use of thermal imager to detect "hot spots" within a home consistent with use of grow lights for marijuana cultivation is a search); *Jardines*, 133 S.Ct. 1409 (holding that use of drug detection dog within curtilage of residence to detect drugs within the home is a search).

^{66. 533} U.S. 27.

^{67.} See id. at 29-30.

William Elliott's belief that Kyllo was using grow lamps in his home to cultivate marijuana plants.⁶⁸

Writing for the majority, Justice Scalia held that the use of the device was a "search" for Fourth Amendment purposes, even though the images were obtained while the thermal imager was set up in a public space and the heat emanations the unit measured were taken from the exterior surface of the residence. ⁶⁹ Unlike the surveillance activities in *Ciraolo*, *Katz*, and *Jones*, it was not the perspective of the agent that was enhanced by using a piece of equipment that would better position him to use his ordinary senses, but rather a device that enhanced his senses, enabling Agent Elliott to sense something he could not have sensed without invading the curtilage of Kyllo's home. Technology allowed him to do that. In *Ciraolo*, and even in *Katz* and *Jones*, agents could have obtained the same information by use of ordinary human senses employed in a space to which the public had free access. Their perspective was improved by technology, putting them in a better position to hear or see, but their senses were not enhanced in the way that the thermal imager allowed.

The question for the *Kyllo* majority then became whether this case would be decided under the rubric of exposure of information to a third-party. Was this information plucked "off-the-wall" from a public place entitled to constitutional protection? Did using the thermal imager from the street constitute a search? Justice Stevens, joined by Chief Justice Rehnquist and Justices O'Connor and Kennedy, viewed the case much like other "plain-view" cases in which the officer was in a place where he was authorized to be when he gathered information that was "knowingly expose[d] to the public." Based on the Court's treatment in *Ciraolo* and other cases, the dissenters reasoned that no "search" had occurred. Justice Scalia and the majority saw it differently, though. Noting that the thermal imager's scan could potentially reveal "intimate" details from within the home, the Court held that even the limited information obtained by the thermal scan was the product of a "search."

Anticipating further advances in technology and the ways in which surveillance would be conducted, Justice Scalia acknowledged what *Kyllo* presaged:

^{68.} See id.

^{69.} See id. The imager, an Agema Thermovision 210, was located in the agent's vehicle when the scans were made. One was taken from across the street from the front of the house, and the second was from the street in the rear of the structure. See id.

^{70.} See id. at 41-44 (Stevens, J., concurring).

^{71.} See id. at 42, n. 2.

^{72.} See id. at 38. Justice Scalia rather famously observed that even a crude device like the one used in the *Kyllo* case "might disclose, for example, at what hour each night the lady of the house takes her daily sauna and bath—a detail that many would consider 'intimate.'" See id.

^{73.} See id. at 40.

To withdraw protection of this minimum expectation would be to permit police technology to erode the privacy guaranteed by the Fourth Amendment. We think that obtaining by sense-enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical "intrusion into a constitutionally protected area," constitutes a search—at least where (as here) the technology in question is not in general public use.⁷⁴

Like other technologies that in the future would, and will, permit ever-expanding amounts of information to be obtained from greater and greater distances, the thermal imager allowed what might be termed a kind of "virtual trespass" that could go undetected by those being watched. And although Justice Scalia resurrected the "trespass doctrine" in *Jones* to decide that affixing a GPS tracking device to a vehicle is a search, he clearly anticipated that technology would outpace the "reasonable expectation of privacy" standard unless a new analytical construct could be found to address the rapidly-changing landscape of surveillance.⁷⁵

One of the technologies that Justice Scalia anticipated in *Kyllo* has now been fully developed and deployed. That device, sold under the trade name "Range-R", To gives law enforcement personnel the ability to "see through walls and other opaque barriers, To a technology that Justice Scalia predicted when *Kyllo* was decided as "a clear, and scientifically feasible, goal of law enforcement research and development. Pecognizing that the Court would be required to apply the Fourth Amendment to techniques and equipment not yet developed, and perhaps not yet imagined, Justice Scalia wrote, "[w]hile the technology used in the present case was relatively crude, the rule we adopt must take account of more sophisticated systems that are already in use or development. Kyllo was a relatively new and incomplete attempt to fashion such a rule.

4. Trespassing to Use Old Technology

Years after its decision in Kyllo, the Supreme Court considered a very old "technology"⁸¹ to determine what was happening within a residence. In

^{74.} See id. at 34 (citation omitted).

^{75.} See Jones, 565 U.S. at 412-13 (stating that in some future case the Court may have to solve the "vexing problems" of long-term surveillance that does not involve a trespass).

^{76.} See Kyllo, 533 U.S. at 36, n.3.

^{77.} See RANGE-R, http://www.range-r.com (last visited Apr. 7, 2018).

^{78.} See id. Range-R doesn't actually permit the police to "see through walls" but it does indicate from positioning on an outside wall whether anyone is in a room on the other side of the wall and, if so, whether that person is moving about or is stationary. See id.

^{79.} Kyllo, 533 U.S. at 36.

^{80.} ld.

^{81.} See Jardines, 133 S.Ct. at 1420 (Alito, J., dissenting) (due to their acute sense of

Florida v. Jardines, 82 Justice Scalia, again writing for the majority on the question of what constitutes a "search," explained that the use of a drug-detection dog sniffing at the front door of a suspect's residence was a "trespass" that warranted Fourth Amendment protection. 83 While some members of the Court believed the case also could have been decided on whether use of the dog to detect drug odors emanating from within the home violated Jardines's expectation of privacy, 84 Justice Scalia and the majority preferred to keep "easy cases easy" by relying on the "property-rights baseline" 86 that had been recognized in Jones.

Interestingly, what made the officers' (and the dog's) actions a trespass was that they exceeded the limits of the "implicit license" that exists for visitors to a home to "approach the home by the front path, knock promptly, wait briefly to be received, and then (absent invitation to linger longer) leave."87 What defeated the implicit license the officers and their dog had to use the front walkway, step onto the porch, and allow the dog to sniff was the investigative intent that prompted their actions. "There is no customary invitation to do *that*," according to Justice Scalia.⁸⁸

While Jardines involved "old" sense-enhancing technology rather than some recent mechanical or digital advance in surveillance and detection, the Court approached the search issue in much the same way it would have done with a modern, sophisticated appliance. Reaffirming the revived trespass rationale, however, added an alternative mode of analysis to the already-difficult determination of whether a reasonable expectation of privacy had been violated by the actions of the police. Justice Scalia apparently believed the "property-based understanding of the Fourth Amendment" would make some cases "easy" to decide, but what had been a one-step inquiry post-Katz and prior to Jones has now become a two-step analysis.⁸⁹

II. THE EVOLUTION OF "SEARCH" DOCTRINE

A crude timeline of the development of surveillance technology on the one hand, and constitutional doctrine on the other, is useful in conceptualizing not only the progression of the science of technology, but also how the Court responded to that progression. Such a timeline might look like this:

smell, dogs have been used in law enforcement for centuries).

^{82.} Id.

^{83.} See id.

^{84.} See 133 S.Ct. at 1418 (Kagan, J., concurring).

^{85.} See id. at 1417.

^{86.} See id.

^{87.} See id. at 1415.

^{88.} See id. at 1416.

^{89.} See id. at 1417; Jones, 565 U.S. at 411.

Technology induced shapeshifting

State of the art

- >1791-1967: Primitive technology until latter-half of 19th Century
- ➤ 1967-2012 (The Katz era): Technology develops rapidly, becomes sophisticated with miniaturization
- >2012-present: Tech development continues and expands in scope and capability at hyper-speed

State of the analysis

- > "Search" limited to physical trespass (see Silverman − 1961)
- ➤ Physical trespass supplanted by REOP, investigative motive ignored, "general public use" debuts in Kyllo (2001)
- ➤ Physical trespass makes a return in Jones and Jardines to take its place alongside REOP

Until the decision in Katz in 1967, devices used for surveillance were only modestly capable of sense-enhancement or perspective-enhancement. The Court experienced no difficulty in concluding, for example, that the use of a flashlight or binoculars, did not transform surveillance or observation into a "search" when it otherwise would not have been one. Likewise, sniffs by dogs trained to detect drugs, bombs, and all manner of contraband, ordinarily are not considered to be searches, 2 although it might be said that dogs enhance human ability to smell by giving their handlers signs of detection when the dogs smell something that humans cannot. While these uses of sense-enhancing "technology" presented some difficult questions of their own, the devices and methods were sufficiently common and available that privacy concerns seemed less acute.

As the "electronic" age ushered in smaller and more sensitive surveillance

^{90.} For a historical perspective on the development of surveillance technology, see generally Toni Weller, The Information State: An Historical Perspective on Surveillance, ROUTLEDGE HANDBOOK OF SURVEILLANCE STUDIES 57-63 (2012); see also Kyllo, 533 U.S. at 33-34 (stating that advances in technology have exposed places previously considered private).

^{91.} See United States v. Lee, 274 U.S. 559 (1927).

^{92.} See United States v. Place, 462 U.S. 696 (1983).

^{93.} See Jardines, 569 U.S. at 15 (2013) (Kagan, J., concurring) (dogs used as "sense-enhancing" tool that is not "in general public use"); State v. Rendon, 477 S.W.3d 805, 813 (Tex. Crim. App. 2015) (Richardson, J., concurring) (use of drug-detection dog is use of "sense-enhancing" device of the sort discussed in *Kyllo*).

equipment, it became increasingly clear that the capability of this equipment was outstripping the awareness of the general public. He may be that the rapid, almost frantic, development of these devices was due to the "space race" in which the United States was engaged, or that it was a by-product of the Cold War and the maturation of electronic espionage, or perhaps that it was of the result of other social and scientific advances. Whatever the reasons, the evolution from the property-based analysis of *Silverman v. United States* in 1961 to the expectation-of-privacy approach of Katz in 1967 soon proved insufficient to deal satisfactorily with such rapid change.

One of the earliest of the Supreme Court's attempts to deal with surveillance by sophisticated devices outside the reach, and sometimes outside the ken, of the general populace was Dow Chemical Co. v. United States. 96 The Environmental Protection Agency (EPA) engaged a commercial aerial photographer to fly over a chemical plant operated by Dow Chemical because the company would not agree to allow the agency to inspect its facility for a second time to determine that it was complying with the Clean Air Act. 97 The issue in the suit brought by Dow against the EPA was whether the aerial photographs obtained without a search warrant by flying over the plant were the product of a "search" within the meaning of the Fourth Amendment, and if so, whether that search was unreasonable. 98 California v. Ciraolo, which was decided the same day as Dow Chemical, settled the question of whether surveillance from an aircraft flying in navigable airspace was a "search,"99 but the photographs taken in Dow Chemical were obtained by "using highly sophisticated surveillance equipment" rather than by the naked eyes of officers passing over a backyard. 100 The Court was forced to at least consider whether

^{94.} See Torin Monahan, "War Rooms of the Street: Surveillance Practices in Transportation Control Centers, The Communication Review 10, 367 (2007) (stating that rapid proliferation of digital technologies throughout everyday life afford surveillance capabilities that resist critical investigation or public awareness).

^{95.} Silverman v. United States, 365 U.S. 505 (1961). In Silverman, the District of Columbia police inserted a "spike mike" into the wall of the defendant's house, penetrating the physical space of the residence in order to overhear conversations. See id. at 506. The majority specifically rejected the suggestion that it should "consider the large questions" of the Fourth Amendment that might be presented by "other frightening paraphernalia which the vaunted marvels of an electronic age may visit upon human society." See id. at 509. Distinguishing cases in which no physical trespass occurred, the Court observed that "the officers overheard the petitioners' conversations only by usurping part of the petitioners' house or office." See id. at 510-11. It concluded that, "this Court has never held that a federal officer may without a warrant and without consent physically entrench into a man's office or home, there secretly observe or listen, and relate at the man's subsequent criminal trial what was seen or heard." See id. at 511-12.

^{96.} Dow Chemical Co. v. United States, 476 U.S. 227 (1986).

^{97.} See id. at 229-30; 42 U.S.C. § 7414.

^{98.} See 476 U.S. at 229-31.

^{99.} See id. at 234-35.

^{100.} See id. at 239.

enhanced surveillance methods might distinguish the claims of Dow Chemical from those of Dante Carlo Ciraolo.

Chief Justice Burger, writing for the Court in *Dow Chemical*, opined that, "[i]t may well be, as the Government concedes, that surveillance of private property by using highly sophisticated surveillance equipment not generally available to the public, such as satellite technology, might be constitutionally proscribed absent a warrant." In making this observation, the Chief Justice debuted a distinction based on the sophistication of the equipment used and its availability for general public use.

The Dow Chemical Court was careful to draw a line between simple sense-enhancing devices and the more "sophisticated" ones that might raise constitutional issues: "The mere fact that human vision is enhanced somewhat...does not give rise to constitutional problems. An electronic device to penetrate walls or windows so as to hear and record confidential discussions of chemical formulae or other trade secrets would raise very different and far more serious questions...."¹⁰²

Seemingly, even the sophisticated aerial camera used in *Dow Chemical* to take photographs "not so revealing of intimate details" was insufficient to elevate the government's conduct to the level of a "search," but the Court imagined a case and technology in which the result would be different. In adopting this formulation, it is impossible to determine whether employing a technology more "sophisticated" than a professional aerial camera would suffice to require constitutional protection, or instead, whether the Court found that the conduct fell short of a search because, while the camera was sufficiently advanced, it was not used to produce "intimate details." In the conduct of the search because, while the camera was sufficiently advanced, it was not used to produce "intimate details."

A. A Distinction Based on Sophistication and Availability

Justice Scalia's characterization of the Agema Thermovision 210 that scanned Danny Kyllo's home for heat emanations placed the device clearly on the side of those "not in general use." To highlight the majority's reliance on the "general use" concept, Justice Scalia concluded his analysis in *Kyllo* by holding that, "[w]here, as here, the Government uses a device *that is not in general public use*, to explore details of the home that would previously have been unknowable without physical intrusion, the surveillance is a "search" and

^{101.} Id. at 238.

^{102.} Id. at 239.

^{103.} See id. at 238-39 (opining that highly sophisticated surveillance equipment not generally available to the public, like an electronic device to penetrate walls or windows, would raise "very different and far more serious questions" than the cameras used in *Dow*).

^{104.} See id.

^{105.} Kyllo, 533 U.S. at 34.

is presumptively unreasonable without a warrant."¹⁰⁶ For Justice Scalia, and surely for his colleagues in the *Kyllo* majority, the fashioning of a "new rule"¹⁰⁷ must have been a difficult attempt to grapple with the rapidly-expanding problems posed by the explosive growth of technology. ¹⁰⁸

But if the *Kyllo* majority struggled with the way to define "searches" by new surveillance devices, their colleagues on the Court remained convinced that existing rules were adequate for the purpose. ¹⁰⁹ Justices Stevens, Rehnquist, O'Connor, and Kennedy took exception to the majority's effort to take "the long view" and decide this case based largely on the potential of yet-to-be-developed technology that might allow "through-the-wall surveillance." ¹¹⁰

The dissenters criticized the majority's bright-line rule by pointing out that "general use" is something of a moving target, 111 and as soon as a device passes into general use, the public loses whatever constitutional protection was afforded against surveillance by that device. 112 Perhaps even more obviously, it is entirely unclear what constitutes "general use," or whether the thermal imager in *Kyllo* qualified for treatment as an exotic piece of equipment. 113 By the time the case was decided by the Supreme Court, it almost certainly was not exotic or generally unavailable. 114

In adopting the "general use" criterion, Justice Scalia placed himself in the uncomfortable position of advocating what might be considered, as Justice Stevens characterized it, a "newly minted rule." NBC News Justice Correspondent Pete Williams got to the nub of this irony in his 2012 interview with Justice Scalia:

Williams: You have a Fourth Amendment that protects against

^{106.} Id. at 40 (emphasis added).

^{107.} See id. at 41 (Stevens, J., dissenting) (characterizing the Kyllo majority's reliance on general use as a "new rule").

^{108.} See Pearlman & Lee, supra, note 58, at 738 (arguing that the Supreme Court attempted in Kyllo to provide generalizable standards and guidelines for technology that is constantly pushing boundaries).

^{109.} See Kyllo, 533 U.S. at 41-59 (Stevens, J., dissenting).

^{110.} See id. at 42.

^{111.} See id. at 47.

^{112.} See id.

^{113.} See id. at 47 n.5. Thousands of the thermal imagers used in Kyllo were in circulation at the time the case was argued, as were thousands of competing units. See History of Thermal Imaging Securities Sales & Integration (Dec. 31, 2012) https://www.securitysales.com/ surveillance/history-of-thermal-imaging/2/Some years ago, in preparing to teach this opinion, I discovered that an Agema Thermovision 210 just like the one used in Kyllo was sold on the eBay online auction site for a couple of hundred dollars. Even at the time of the opinion, these units could be purchased or rented by the public. See id.

^{114.} See id.

^{115.} See id. at 46.

unreasonable searches. So you have that language, you know what a search meant at the time of the founding, sort of knocking on somebody's door or entering their home, but how do you apply technology in the modern age? Use of cell phone tracking or a GPS gizmo on a car or a wiretap or a beeper, how do you as a textualist know what to do about that?

Scalia: Okay, now that question puts into play not just textualism, but an aspect of textualism which I believe in, which is called originalism. That is, you give the words not only their fair meaning, but the fair meaning that they bore at the time they were adopted. Now, with respect to phenomena that existed at the time of the Constitution, that's easy. You know what an unreasonable search at that time was. But what do you do with new phenomena, as you— as you just talked about? For new phenomena, you... you have to... pfff (gesturing upward with his hand)... calculate what, given that this is what an unreasonable search was at the time of the framing, how would it apply to this new phenomenon? But you start from that base. And you know we have a case, the Kyllo case, in which the issue was whether uh, uh, the police could use, uh, infrared technology to find out what was going on in a house-

Williams: Whether somebody was growing marijuana.

Scalia: They were growing marijuana. And that would heat the roof and they could tell by infrared whether that was going on.

Williams: Because they'd be using lamps to grow the plants.

Scalia: They'd be using those heat lamps. And the Court held—I wrote the opinion, so it must have been an originalist opinion—uh, that, uh, with this new phenomenon it is achieving exactly what the old phenomena that the Fourth Amendment was directed at would achieve, and that is, discovering what is going on in somebody's private home. And if you're using a new technology to do that very same thing, it's prohibited by the Fourth Amendment.

Williams: Doesn't that seem, though, like trying to divine the Founders' intent? And how is that different from trying to understand Congressional intent?

Scalia: Well, no, I wouldn't call it divining the Founders' intent. I would call it, uh, divining or determining what, what the words that the Founders adopted or that the People ratified in the Fourth Amendment, what they mean as applied to these new phenomena.¹¹⁶

The Justice's explanation for his adoption of the "general use" approach provides valuable insights into his mode of constitutional interpretation, particularly as applied to the Fourth Amendment, but it will be unsatisfactory to many of those who believe the Court, led in this instance by Justice Scalia, changed rather than interpreted not only the words of the Amendment, but the understanding that the Framers would have had.

^{116.} See Scalia: Judges Should Interpret Words, Not Intent, NBC NEWS (Aug. 22, 2012), http://dailynightly.nbcnews.com/_news/2012/08/22/13416169-scalia-judges-should-interpret-words-not-intent?chromedomain=usnews.

B. What's Wrong with "General Public Use"?

The principal criticisms of "general use" relate to both of the interpretative goals derived from textualism and originalism that Justice Scalia sought to achieve in *Kyllo*. First, there clearly is no direct textual support for the idea that whether a police investigative activity is a "search" is determined in part by whether it is aided by something "that is not in general public use." Thermal imagers and other forms of technology may not have been known to the Framers, but there certainly were devices and methods "not in general public use" in the Eighteenth Century, and that limitation could have been part of the Fourth Amendment had it occurred to the drafters, or had it been thought appropriate.

However, as Justice Scalia has explained, the absence of explicit language within the constitutional text does not—perhaps cannot, and almost certainly should not—prevent the Supreme Court from applying protections to citizens from government actions that were not anticipated by the drafters of that text. He favored applying the privacy values known to the Framers, as reflected by the textual language they used and the environment in which they lived, to fill the gaps. Notwithstanding his rejection of the suggestion that crafting an interpretation of those values applied to new phenomena is tantamount to "divining the Founders' intent," the method seems at least dangerously close to doing just that.

And so, a second criticism of the "general use" approach to new phenomena, certainly for originalists, is that it is not true to originalism. *Kyllo* posed a relatively simple problem for the originalist: While the concept of seeing through walls with an infrared scanner may have been quite new, the concept of the government snooping in someone's house without a warrant is not. If the principal evil against which the Fourth Amendment was aimed was the entry into one's home and rummaging through one's effects, prohibiting a "virtual" entry and rummaging by technological means in the Twenty-First Century seems consistent with the values of the Framers. 118

Much less clear, however, is the application of the "general use" rule to surveillance technology that does not invade, or even involve, the sacred space of the home. Perhaps Justice Scalia's resurrection of the "trespass doctrine" in *Jones* is best understood as an avoidance technique used to provide an acceptable originalist alternative to reasonable expectation of privacy and its

^{117.} See id.

^{118.} Here again, it is tempting to conflate "values" with "intent" when discussing originalism, even though the words do have differing meanings. Justice Scalia did not use the word "values" in describing how his methods differ from applying the intent of the Founders, but the use of the Founders' values seems unavoidable in any effort to discern whether they would have considered a particular action by the government to have been prohibited by the Fourth Amendment.

unhelpful new baggage, the "general use" rule. A pivot to an old property-based doctrine may have temporarily avoided dealing with the thorny privacy expectation problem presented by a GPS tracking device attached to a car, ¹¹⁹ but it cannot distract from the charge that Justice Scalia's opinion in *Kyllo* bears an uncomfortable resemblance to judicial activism.

No Justice in living memory more famously and publicly rejected the notion that the Supreme Court must be free to adopt new interpretations of the Constitution in order to conform the document to the needs and values of the present than Justice Scalia. He was quoted as saying,

The only good Constitution is a dead Constitution. The problem with a living Constitution in a word is that somebody has to decide how it grows and when it is that new rights... come forth. And that's an enormous responsibility in a democracy to place upon nine lawyers, or even thirty lawyers. 120

In light of his strong belief that the Court owes a duty of loyalty to the language of the Constitution, and should interpret it only in ways that are faithful to the understanding of those who wrote it, it is more than ironic that Justice Scalia would adopt a mode of analysis in the area of Fourth Amendment law that bears no resemblance to the text, and has precious little logical connection to the preservation of the core privacy values that text seems intended to protect. The best argument that can be marshalled in defense of "general use" is that, at least in the *Kyllo* case, it worked to protect the sanctity of the home, a value that assuredly was central in the original meaning of the Amendment. But it seemed wholly inadequate to the task in *Jones*, the GPS tracking case that had nothing to do with domestic privacy, and even in *Jardines*, the dog-sniff case in which the sanctity of the home was in jeopardy.

^{119.} Writing in *Jardines*, Justice Scalia made clear that trespass, and not reasonable expectation of privacy, was the basis for the Court's holding, and that trespass is to be viewed as an alternative way to approach questions of the Fourth Amendment's applicability: "The *Katz* reasonable-expectations test 'has been *added to*, not *substituted for*,' the traditional property-based understanding of the Fourth Amendment, and so is unnecessary to consider when the government gains evidence by physically intruding on constitutionally protected areas." 569 U.S. at 11 (quoting *Jones*, 565 U.S. at 409). It may, or arguably may not, be a trespass to place a GPS tracking device on the outside of a vehicle, but that position presents somewhat fewer problems than the reasonable expectation of privacy approach. It is impossible to argue credibly that a GPS tracking device is not "in general public use" when millions of Americans carry such a device with them every day. The vehicle, never an "effect" that has garnered much respect from the Supreme Court, is not a "house," and its movements on public streets are visible to all who care to look.

^{120.} See Bruce Allen Murphy, Justice Antonin Scalia and the 'Dead' Constitution, N.Y. TIMES (Feb. 14, 2016), https://nyti.ms/20wPtca. I have heard him say much the same thing in public forums and in private conversation on several occasions. He railed against the ideas of a "living Constitution" as being illegitimate and of placing the Justices in the position of being a continuing constitutional convention.

III. WHERE WE ARE

In light of *Jones* and *Jardines*, "search" doctrine can now be said to have two "heads." Those cases revive, or perhaps more accurately, resurrect from the dead, the use of a property-based trespass trigger for Fourth Amendment protections. Trespass does not supplant the reasonable expectation of privacy analysis of *Katz*, however; it merely supplements it by providing an alternative way to determine whether a search was conducted. In doing so, trespass simultaneously calls into question the health of the "general use" inquiry, and presents difficult questions of its own.

Whatever small merit lies in the "general use" analysis of government conduct, the Court's long-standing core inquiry into reasonable expectation of privacy also has never been entirely clear. Part of this confusion has been engendered by the vagueness inherent in reasonableness, and part stems from the occasional description of the expectation as "legitimate" rather than "reasonable." In *Smith v. Maryland*, ¹²⁵ Justice Blackmun phrased it this way: "Consistently with *Katz*, this Court uniformly has held that the application of the Fourth Amendment depends on whether the person invoking its protection can claim a 'justifiable,' a 'reasonable,' or a 'legitimate expectation of privacy' that has been invaded by government action." ¹²⁶

A. Viewing "Search" Through a Normative Lens

In making these adjectives interchangeable, the Court suggests that no meaningful distinction exists between them. However, as Professors Joshua Dressler and Alan Michaels point out, "to say that a person has a 'legitimate' or

^{121.} See See Dressler Et Al., supra, note 9, § 6.03[A], at 71. Professor Dressler observes that "it is not possible for a defendant to show that particular government activity triggers the Fourth Amendment under either the property-right trespass approach that predated Katz... or according to Katzian law." See id.

^{122.} In an article by Professor Orin Kerr, he observes that, "Although *Jones* purports to restore a preexisting trespass test, no trespass test existed that the court could restore." *See* Orin Kerr, *Swabbing a Car Door Handle in a Public Lot to Collect DNA is a Fourth Amendment Trespass Search*, The Washington Post (Apr. 24, 2017), https://www.washingtonpost.com/news/volokh-conspiracy/wp/2017/04/24/swabbing-a-cardoor-handle-in-a-public-lot-to-collect-dna-is-a-fourth-amendment-trespass-search/?utm term=.c06804eba356.

^{123.} See Jardines, 133 S.Ct. at 1417 (finding that Katz test has been added-to, not substituted for, the trespass approach).

^{124.} Orin Kerr described some of these difficulties in considering a case in which a door handle on an automobile was swabbed for DNA, and the U.S. District Court was forced to consider the extent to which the law of trespass to chattels could, or should, dictate the application of the Fourth Amendment. See Kerr, supra, note 122.

^{125. 442} U.S. 735, 740 (1979).

^{126.} See id.

'justifiable' expectation of privacy is to draw a normative conclusion—a value judgment—that the individual has a right to the privacy expectation."127 Ignoring the distinction between "reasonable" expectation of privacy—an objective evaluation - and one that is "legitimate" or "justifiable" eliminates or at least diminishes the consideration of shared values in determining whether an expectation of privacy "counts." The normative component of a privacy expectation may skate too close to "subjective expectation" to be embraced enthusiastically by the Supreme Court, but its pull is undeniable. Several years ago, I asked the law students in my Advanced Search and Seizure class how many of them had an expectation of privacy in their emails. All of the students indicated that they did. I then asked how many of them, based on what they had learned about government and private access to email correspondence, believed that expectation was reasonable. Again, all of the students claimed a reasonable expectation of privacy, even while they acknowledged that the legal doctrine was to the contrary. Those beliefs were not based on the cases the students had studied, or on comments I had made in the class, but rather on a normative judgment that their correspondence, whether in traditional letter form, or in a contemporary digital form, was entitled to a rather high degree of protection from prying eyes.

In essence, the normative evaluation of what constitutes a "search" has little or nothing to do with the statistical probability that the government will gain access to information or to a thing. It has everything to do with what society as a whole thinks "should be" private. In this, it is unlike a subjective expectation of privacy in which an individual, despite the odds of discovery and the consensus expectations of the society in which he lives, persists in the belief that his privacy rights exist and will be maintained. Someone walking down a crowded public sidewalk with a baggie of marijuana protruding visibly from his pocket may subjectively believe his contraband is private because it is no one's business what he has, and no one should be looking. But that belief would not be either objectively reasonable (the probability of discovery is quite high) or reasonable in a normative sense (others walking on the sidewalk wouldn't share the view that contraband exposed to the public is nevertheless private).

Applying this distinction to the facts in *Ciraolo*, it may or may not have been objectively reasonable for Mr. Ciraolo to expect his double privacy fencing to keep anyone from seeing his marijuana crop. That would depend on the likelihood that someone would fly over the yard, see and recognize the plants for what they were, and report that observation to the police. The Supreme Court, without elaborating on the basis for its conclusion, held that, "In an age where private and commercial flight in the public airways is routine, it is unreasonable for respondent to expect that his marijuana plants were

constitutionally protected from being observed with the naked eye from an altitude of 1,000 feet." Recall that the fact that the overflight and observation were "directed at identifying the plants" was, according to the Court, irrelevant 129

The source of so much discontent with the holding in *Ciraolo* is that minds will differ about what is "reasonable" to believe. 130 Many would think, perhaps not unreasonably, that the likelihood of discovery in this situation is sufficiently slight that Ciraolo's expectation of privacy deserved constitution protection. Far from being a scientific or objective calculation, "reasonableness" is itself a kind of focused guess informed by the life experiences and values of the person deciding whether the standard has been met. 131

Had a more normative view been taken in *Ciraolo*, the outcome might have been very different. Law students, who may not be representative of the general population, often struggle with the Court's ready dismissal of Ciraolo's privacy expectations, probably because his efforts to shield his yard from the usual sort of observation were impressive, and apparently were largely effective. What constitutes a "search" is not determined by a public opinion poll, ¹³² but at the same time, a gross departure from the public's common-sense understanding of the limits of surveillance undermines confidence in the Court's willingness to protect privacy values.

B. The Role of Invasiveness

Were the threshold to Fourth Amendment protections judged in a way that explicitly incorporates normative judgment, along with an appraisal of the objective probability of discovery, the search inquiry might better reflect the kind of originalism espoused by Justice Scalia. Understanding a "search" to mean government conduct that is "invasive," as opposed to that seen only as violating a "reasonable" expectation of privacy, more clearly addresses the actual, but neither the subjective nor the statistically-based, expectations people have. Surely, the Framers were not worried only about "houses," as evidenced

^{128.} See Ciraolo, 476 U.S. at 215.

^{129.} See id. at 213.

^{130.} Cf. Gerald S. Reamey, When "Special Needs" Meet Probable Cause: Denying the Devil Benefit of Law, 19 HASTINGS CONST. L.Q. 295, 300-02, 327-30 (1992) (determining reasonableness involves ad hoc decision-making and use of reasonableness in "special needs" searches leads to inconsistency).

^{131.} See id.

^{132.} Public opinion has been advanced, however, as a measure of the degree to which government surveillance intrudes upon the privacy of citizens, and as a determinate of the level of suspicion required for such surveillance. Christopher Slobogin, Privacy At Risk: The New Government Surveillance And The Fourth Amendment 32-33 (2007) (stating that some assessment of societal attitudes about intrusiveness should inform the analysis of whether surveillance is a "search").

by the inclusion of persons, papers, and effects within the prohibition on unreasonable searches.¹³³ Taken as a whole, and in light of the history and experience of the Framers, it was the government's exercise of unbounded power to invade the privacy of "the people" that prompted the textual guarantees of the Fourth Amendment.¹³⁴ Viewed with this historically faithful and—some would say "original," normative understanding—invasiveness better reflects the standard for initiation of constitutional protection than whether an expectation of privacy is "legitimate," "justifiable," or "reasonable."

Since the shift from a property-based definition of search to the Katz formulation, there also has existed a constant concern among some that the reasonableness of an expectation of privacy can be changed in a moment by the introduction of new technology or a simple public notice. 135 If society, like my search and seizure students, has been told that unencrypted email is always "public," is it no longer possible to have a "reasonable" expectation of privacy in the contents of one's electronic correspondence? When those students said they nevertheless believed their email to be private, they were expressing a shared normative view. Knowing that their houses, papers, and effects were subject to warrantless search by the King's agents would have meant that American Colonists could have had no reasonable expectation of privacy, even though the chance that any one individual would be searched was likely quite small. But their view that their privacy "rights" were violated by those occasional intrusions inspired them to create constitutional protection against such "searches." It is this kind of intuitive sense of what counts as excessive governmental intrusion that matters at least as much as any empirical evidence that people's expectations are reasonable.

An example of this normative influence can be seen in the Supreme Court's treatment in *Bond v. United States*.¹³⁶ During the course of a stop of the bus on which Mr. Bond was riding for an immigration check at a Border Patrol checkpoint, the border patrol agent felt and "squeezed" Bond's bag that had

^{133.} The Fourth Amendment provides: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated" U.S. CONST. amend. IV (emphasis added).

^{134.} It has been argued that the desire of the Framers to curb the government's power, and not merely to protect the people's privacy, motivated the Fourth Amendment. See Ohm, supra, note 56, at 1334. My argument that the prohibition of unreasonable searches necessarily includes governmental "invasions" reflects some agreement with this view. If the thrust of the Fourth Amendment is to limit the power imbalance between the government and its people, its protections should extend beyond the current, crabbed understanding that "reasonable expectation" has been given.

^{135.} See Ohm, supra note 56, at 1320 (stating that "no expectation of privacy will be deemed reasonable in a world without privacy").

^{136. 529} U.S. 334 (2000).

been placed in the bin above his seat.¹³⁷ Feeling a "brick-like" object in the bag, the agent opened it and discovered a "brick" of methamphetamine.¹³⁸ The majority opinion, written by Chief Justice Rehnquist, distinguished this "search" from the observation in *Ciraolo*, holding that, "physically *invasive* inspection is *simply more intrusive* than purely visual inspection."¹³⁹ This is so, according to the Court, because "travelers are particularly concerned about their carry-on luggage; they generally use it to transport personal items that, for whatever reason, they prefer to keep close at hand."¹⁴⁰

It is noteworthy that in both *Bond* and *Ciraolo*, the observations were made from a public space and the defendants exposed themselves to that public observation. As the Court noted in *Bond*, travelers expect that their luggage and personal items placed in an overhead bin will be subjected to a certain amount of touching, moving, jostling, and handling by fellow travelers and others. ¹⁴¹ In deciding that the agent's manipulation of Bond's bag was a "search," the Court relied on differences in the degree of invasion or intrusion to conclude that the defendant had a reasonable expectation of privacy.

Surely, any traveler on the bus could have manipulated the bag to the same extent and, as any traveler must know, it is not uncommon for one's belongings to be handled by others. The difference apparently lay in the degree of manipulation. Members of the majority seemed offended by the probing for evidence, not expressly because of the agent's investigative intent, the but because he felt the bag in "an exploratory manner." In reaching this conclusion, the Justices were relying on a normative view that the agent had simply gone too far, perhaps because, as members of the traveling public themselves, the idea of a government agent trying to feel what they had placed in the overhead bin was personally offensive.

Using normative analysis is not without its disadvantages. One of the chief among these is that it does not tie the Fourth Amendment to a fixed point of development. That is, as values and commonly-held beliefs change, so does the meaning of privacy, and with it, the application of constitutional protection. 145

^{137.} See id. at 335-36.

^{138.} See id.

^{139.} Id. at 337 (emphasis added).

^{140.} See id. at 337-38.

^{141.} See id. at 338.

^{142.} See id. (stating that bus passengers clearly expect their bags may be handled).

^{143.} The court of appeals, citing *Ciraolo*, explicitly rejected the idea that the agent's purpose in squeezing the bag mattered. *See* United States v. Bond, 167 F.3d 225, 227 (5th Cir. 1999) (citing *Ciraolo*, 476 U.S. at 210).

^{144.} See 529 U.S. at 338-39.

^{145.} This is, of course, also an advantage in that normative analysis not only allows, but requires, consultation of changing notions of privacy. The impact of technological innovation can be accounted for relatively quickly once it is understood that determinations are necessarily ad hoc, even though they are guided by static core principles.

In addition to this common critique of the "living Constitution" is the difficulty inherent in deciding who should say what these values are, and whether those values are offended by the government's conduct in a given case. But the problem with a "reasonable expectation of privacy" approach is that it also does not tie the Fourth Amendment to a fixed point of development. As discussed, the determination of reasonableness is hardly clear and certain, and ultimately it is the opinion of a majority of nine lawyers that resolves the question, just as it would be if those same arbiters were thinking about a problem in more normative terms.

A normative analysis, when done accurately, reflects the shared values of society, and adherence to those understandings produces more readily accepted outcomes. Here, the difficulty lies in knowing what those values are. If my law students believe that their email is private, for example, is that a shared understanding? If so, is that understanding one that society at large would accept?

To the extent that the intent of the Framers is considered, it must be conceded that they were motivated by the offense of invasion of their houses, papers, and effects. A normative approach to the Fourth Amendment would be faithful to the same motivation, limiting the government's intrusion into those places and things that "the people" believe should be private. On the other hand, normative analysis largely ignores the statistical probability that any of these places or things will be discovered by the government, an important consideration in its own right.

C. Investigative Intent

If the *Bond* opinion contains normative elements, it also implicitly recognizes that investigative intent plays a role in determining whether a probing for evidence is a "search." As noted, the *Bond* majority seemed offended by the agent's touching the bag in "an exploratory manner." What distinguishes an "exploratory" feeling from one that is "non-exploratory" if not the purpose behind the tactile investigation? While the Supreme Court generally has disavowed reliance on an officer's investigative intent in evaluating whether a search occurred, 148 its stance has shifted somewhat in

^{146.} Professor Slobogin captured this idea in the promotion of his "proportionality principle":

Thus, if the proportionality and exigency principles ruled, courts could more easily avoid the temptation to define the Fourth Amendment threshold in terms of assumptions of risk, and might be more willing to speak of that threshold in the terms *Katz* has always stood for: expectations of privacy *society* recognizes as reasonable.

See Slobogin, supra, note 132, at 211.

^{147.} See Bond, 529 U.S. at 338-39.

^{148.} See Ashcroft v. al-Kidd, 563 U.S. 731, 736 (2011) (holding that Fourth

recent cases.

In *Florida v. Jardines*, ¹⁴⁹ for example, the majority held that bringing a trained narcotics dog up the sidewalk of a home for the purpose of sniffing around the front door in order to detect marijuana odors emanating from the house was unlike the usual approach to a residence. ¹⁵⁰ Ordinarily, when someone approaches a door and knocks, that person's entry onto the land and approach are permitted for a limited time and purpose. As Justice Scalia explained, "[t]his implicit license typically permits the visitor to approach the home by the front path, knock promptly, wait briefly to be received, and then (absent invitation to linger longer) leave." ¹⁵¹ But then he observed in his majority opinion that, "[t]he scope of a license—express or implied—is limited not only to a particular area *but also to a specific purpose*." ¹⁵²

Clearly, the fact that the officers went to Jardines's home with a drug dog to investigate unverified information that the defendant was growing marijuana in his residence convinced the Court that this was not a social call, or even a "knock and talk," but rather was a deliberate attempt to confirm the tip by allowing the drug dog to sniff around the front door of the home, accomplishing something visual surveillance could not. The State appears understandably to have relied on Ashcroft v. al-Kidd and Whren v. United States for its argument that the subjective intentions of the officers were irrelevant. In Whren, Justice Scalia himself wrote for the majority that, "[s]ubjective intentions play no role in ordinary, probable-cause Fourth Amendment analysis," a position he reiterated later in al-Kidd. 157

Rather than apply the Court's "intent of the officer is irrelevant" philosophy in *Jardines*, Justice Scalia distinguished its prior holdings: 158

The State points to our decisions holding that the subjective intent of the officer is irrelevant [T]hose cases merely hold that a stop or search that is objectively reasonable is not vitiated by the fact that the officer's real reason for making the stop or search has nothing to do with the validating reason. ¹⁵⁹

Amendment inquiry is an objective inquiry); Whren v. United States, 517 U.S. 806, 813 (1996) (holding that constitutional reasonableness does not depend on the actual motivations of the officers involved).

- 149. 133 S.Ct. 1409 (2013).
- 150. See id. at 1416.
- 151. Id. at 1415.
- 152. Id. at 1416 (emphasis added).
- 153. See id. at 1413-18.
- 154. See 563 U.S. 731.
- 155. See 517 U.S. 806.
- 156. Id. at 813.
- 157. See 563 U.S. at 736.
- 158. See Jardines, 133 S.Ct. at 1416-17.
- 159. See id. at 1416 (emphasis in original).

The Supreme Court has not been consistent in its treatment of the role of investigative intent, sometimes making that intent the distinguishing factor in what is, and what is not, a search. 160 While Whren and al-Kidd dealt with claims of pretext stops, other cases involving inventory "search" and detentions based on a community caretaking function have made clear that an officer's investigative motive disqualifies a procedure as one of either of those two exceptions to the Fourth Amendment's warrant preference. 161 The import of these cases is simple: If the police are investigating a crime and their actions are prompted by that investigation, the "ordinary" Fourth Amendment protections of probable cause, warrant, and prior judicial authorization apply. However, if the police action is not a criminal investigation, but is done for some "special need" or regulatory or administrative purpose, Fourth Amendment protections are eased or even disappear. The simple, central notion behind these holdings is that the protections of the probablecause/warrant scheme should not be abandoned when law enforcement officers are investigating crime.

A significant, if contradictory, recognition of the importance of investigative intent in the "search" context comes from another "new technology" case written by Justice Scalia. In *Jones*, the GPS-tracking case in which the Court relied on the trespass doctrine, the majority approved this language: "A trespass on 'houses' or 'effects,' or a *Katz* invasion of privacy, *is not alone a search unless it is done to obtain information*; and the obtaining of information is not alone a search unless it is achieved by such a trespass or invasion of privacy." ¹⁶³

Investigative motive, the intention to act in order "to obtain information,"

^{160.} See, e.g., South Dakota v. Opperman, 428 U.S. 364, 376 (1976) (holding that inventory cannot be based on investigative motive); Corbin v. State, 85 S.W 3d. 272, 277 (Tex. Crim. App. 2002) (holding that community caretaking function cannot be based on non-community caretaking motive). In Coolidge v. New Hampshire, a plurality of the Supreme Court imposed an "inadvertence" requirement on plain-view seizures of evidence. See 403 U.S. 443, 469 (1971). While Coolidge did not address the threshold question of whether investigative intent or motive plays a part in determining whether police activity constitutes a "search," it demonstrates the concern of some members of the Court that, given the opportunity, law enforcement investigators could exploit the plain-view doctrine to avoid the judicial oversight of the warrant process. See id. at 470-71. The inadvertence requirement was later disavowed in Horton v. California, 496 U.S. 128 (1990).

^{161.} See South Dakota v. Opperman, 428 U.S. 364, 375-76 (1976) (holding that as in Cady v. Dombrowski, 413 U.S. 433 (1973), which first articulated "community caretaking" grounds for warrantless search, there was no indication that vehicle inventory was conducted with an investigative motive); Wright v. State, 7 S.W.3d 148, 151 (Tex. Crim. App. 1999) (holding that the search in Cady was not conducted to uncover evidence of criminal activity).

^{162.} See Reamey, supra, note 130 (chronicling the various administrative and "special needs" searches that do not require probable cause or a warrant, and sometimes require no individualized suspicion at all).

^{163.} See Jones, 565 U.S. at 408 n.5 (emphasis added).

is a *sine qua non* of the constitutional meaning of "search." That motive may be insufficient by itself to trigger Fourth Amendment protection, but it is an indispensable component of the conduct that does.

IV. RE-SHAPING OUR UNDERSTANDING OF THE FOURTH AMENDMENT

In spite of efforts by some members of the Supreme Court to faithfully and consistently interpret privacy protection from the government in an originalist fashion, the Fourth Amendment cases remain, as Roger Dworkin said in 1973, "a mess." The current confusion of views makes the "search" issue seem more like a tiny house to which has been tacked on additions and renovations, each of which was designed to address a need of its time. Coherency has been lost. Some of the additions arguably never served their original purpose very well, while others appear to be vestigial structures in search of a new purpose.

Notwithstanding the Court's assurances to the contrary regarding the constancy of its policy, ¹⁶⁵ the trespass doctrine held sway for a considerable period, only to be replaced by a focus on reasonable expectation of privacy divorced from any consideration of whether a property incursion occurred. Trespass was then restored, albeit in a poorly defined manner, to the search analysis, but this time it was to be used as an alternative, or perhaps in addition, to reasonable expectation of privacy. Each of these varying views of the meaning of the Fourth Amendment undoubtedly reflected an attempt at a "better" and more faithful understanding of the scant text, but the result of this shifting notion of what constitutes a search surely contributed to uncertainty among law enforcement, legal professionals, and lower courts ¹⁶⁶ as they have struggled to apply the concept *de jour* to situations that could not have been imagined at the time of the framing.

The trespass doctrine was doomed from its inception. Its primary flaw is that its conception of the Fourth Amendment has much more to do with physical intrusion or invasion of spaces than it does with privacy in the larger sense. Surely, forcible police entry into a private home is invasive, and surely the Framers were sensitive to the privacy violation a forcible entry entails. But privacy can be violated by means other than physical invasion. This realization led the Supreme Court in *Katz* to observe famously that,

^{164.} See Roger B. Dworkin, Fact Style Adjudication and the Fourth Amendment: The Limits of Lawyering, 48 IND. L.J. 329, 329 (1973).

^{165.} See Jones, 565 U.S. at 405-07 (holding that Katz did not repudiate the understanding that the Fourth Amendment embodies a particular concern for government trespass upon the areas it enumerates).

^{166.} See Weaver, supra, note 14, at 239 (stating that decisions post-Katz have not articulated a satisfactory replacement for Katz test and some Justices have suggested that a new approach is necessary to address technology); See generally Kaitlyn R. O'Leary, Note, What the Founders Did Not See Coming: The Fourth Amendment, Digital Evidence, and the Plain View Doctrine, 46 SUFFOLK U.L. REV. 211 (2013).

[A]lthough a closely divided Court supposed in *Olmstead* that surveillance without any trespass and without the seizure of any material object fell outside the ambit of the Constitution, we have since departed from the narrow view on which that decision rested. Indeed, we have expressly held that the Fourth Amendment governs not only the seizure of tangible items, but extends as well to the recording of oral statements, overheard without any "technical trespass under... local property law." *Silverman v. United States*, 365 U.S. 505, 511. Once this much is acknowledged, and once it is recognized that the Fourth Amendment protects people – and not simply "areas"—against unreasonable search and seizures, it becomes clear that the reach of that Amendment cannot turn upon the presence or absence of a physical intrusion into any given enclosure. 167

This first major re-shaping of the Fourth Amendment to expand its reach to intangible objects obtained without violating a physical space in which the suspect could claim a protected interest marked deeper and more nuanced recognition of the broad interests encompassed by people, houses, papers, and effects.

While the limited and archaic property-focused view of the trespass doctrine gave way to a more malleable and privacy-centered construction, reasonable expectation of privacy has always had its own problems. ¹⁶⁸ The division of privacy expectation into a subjective and objective prong made things worse in some cases. The subjective expectation, which is always claimed by someone who feels invaded, offers little help in the determination of whether a search has occurred. When it plays a role, subjective expectation usually is employed to deny a person Fourth Amendment protection without reaching the question of whether the expectation was reasonable. At best, a subjective expectation inquiry plays a very limited gatekeeping function.

Reasonable expectation, on the other hand, is hardly a "bright-line rule," and probably shouldn't be. Its very flexibility is both its strength and its weakness, creating a scope for the Fourth Amendment that trespass could not provide by itself, while simultaneously assuring uncertainty in the absence of a clear and consistent articulation of the Court's understanding of what expectations are "reasonable," and why. That kind of consistent

^{167.} See Katz, 389 U.S. at 353.

^{168.} See Maclin, supra, note 15, at 73-75 (arguing that the focus in Katz on people rather than places without explicating the protections to which "people" are entitled, strips the decision of substance. Its "malleability and emptiness" rendered Katz "especially vulnerable in cases involving technological change."); Weaver, supra, note 14, at 237 (promise of Katz has remained unfulfilled as Supreme Court struggled to apply reasonable expectation of privacy).

^{169.} See Maclin, supra, note 15, at 79 (stating that due to Katz's lack of substance, "[e]xpectations theory and risk analysis replaced Katz as the defining methodology"). Professor Wayne LaFave notes that,

[[]W]hile Katz "has rapidly become the basis of a new formula of fourth amendment

conceptualization is all the more challenging when the Court faces an everchanging barrage of surveillance and detection techniques.

Expectations, unlike trespass, must be evaluated in light of rapidly emerging knowledge about what information the Government can and does acquire, and how it acquires it. As noted previously, expectations can be manipulated or destroyed by simply announcing, for example, that all cell phone communication is being intercepted and screened, or that drones will henceforth conduct 24-hour surveillance of a neighborhood.¹⁷⁰ Even if no overt attempt is made to change privacy expectations, they nevertheless will change merely because a "new" technology becomes commonplace or ubiquitous. The GPS tracking capability known to be built into smart phones today might well defeat any argument that accessing tracking data associated with that phone is a search.¹⁷¹

Reasonable expectation also is deficient if viewed in a strictly objective fashion, as the phrase implies. As discussed earlier in this article, one of the reasons the result in *Ciraolo* is unsatisfactory is because the Court takes a quasi-empirical approach to the determination of reasonableness.¹⁷² Mr. Ciraolo seems to the reader of the opinion to have had a privacy expectation that, at

coverage," it can hardly be said that the Court produced clarity where theretofore there had been uncertainty. If anything, the exact opposite has occurred. The pre-Katz rule, though perhaps "unjust," was "a workable tool for the reasoning of the courts." But the Katz rule, which the Court has since—somewhat inaccurately—stated as the "reasonable 'expectation of privacy"—test, is by comparison "difficult to apply."

WAYNE R. LAFAVE, 1 SEARCH AND SEIZURE § 2.1(b) (5th ed. 2017).

170. See Anthony Amsterdam, Perspectives on the Fourth Amendment, 58 MINN. L. REV. 349, 384 (1974):

An actual, subjective expectation of privacy obviously has no place in a statement of what *Katz* held or in a theory of what the fourth amendment protects. It can neither add to, nor can its absence detract from, an individual's claim to fourth amendment protection. If it could, the government could diminish each person's subjective expectation of privacy merely by announcing half-hourly on television that 1984 was being advanced by a decade and that we were all forthwith being placed under comprehensive electronic surveillance.

ld.

171. See Slobogin, supra, note 132, at 208 (writing that "general public use" stems from the notion that privacy cannot be expected from technology we should know ordinary people use every day); Brian L. Owsley, Cell Phone Tracking in the Era of United States v. Jones and Riley v. California, 48 Tex. Tech L. Rev. 207, 208-09 (2015) (commenting that many cell phones have GPS tracking capability, allowing the location of the phone to be determined within ten meters); Aaron Smith, Record shares of Americans now own smartphones, have home broadband, PEW RESEARCH CENTER (Jan. 12, 2017), http://www.pewresearch.org/fact-tank/2017/01/12/evolution-of-technology.

172. The Court in *Ciraolo* based its opinion on the flying public being able to view the marijuana without addressing the likelihood that anyone actually would have done so. The opinion assumes that the risk of discovery was high, and neglects the possibility that it really was quite low. The majority merely notes that, "[a]ny member of the public flying in this airspace who glanced down could have seen everything that these officers observed." *Ciraolo*, 476 U.S. at 213-14.

least, was not unreasonable.¹⁷³ While the Court neglected to discuss the frequency of flights over the property, unless Ciraolo was growing marijuana directly under, or closely to the side of, a flight or glide path, the odds seem very much to favor his apparent belief that two privacy fences around the perimeter of the property would suffice. And yet, the Court took the view that because someone *could* fly over in navigable airspace and see the crop, any privacy expectation Ciraolo had was unreasonable.

Had the *Ciraolo* Court infused its judgment with a normative aspect, as it did in *Bond*, its decision might have been different, and more satisfactory. At least, consideration of how society might view the adequacy of Ciraolo's efforts to maintain privacy would have provided an important insight that empirically-based objectivity alone lacked.

None of this is to say that reasonable expectation of privacy and the core principle of the trespass doctrine play no legitimate role in deciding whether the Fourth Amendment applies to particular governmental action. Rather, it is to say that exclusive reliance on either one, or even on both, as they are currently formulated and most often used, is inadequate to the task of applying the Constitution to newly-developed or newly-deployed surveillance technologies.

Investigative motive or intent also has played a part in holding that what law enforcement officers did was a "search." Indeed, Justice Scalia, writing for the majority in *Jones*, rejected the view that mere trespass or violation of a reasonable expectation of privacy could be a search "unless it is done to obtain information." While intent or motive has been employed reluctantly by the Court due to the difficulty inherent in discerning what an officer, or anyone else, is thinking, and what motivates their act, it is not impossible for fact-finders to reach conclusions about the thought processes of actors. Courts do this all the time.

Had the Court used investigative intent or motive in deciding the *Ciraolo* case, that factor obviously would have weighed in favor of affording constitutional protection to the defendant.¹⁷⁸ The interpretation of the Fourth

^{173.} In fact, the California Court of Appeals found the expectation quite reasonable. See California v. Ciraolo, 208 Cal. Rptr. 93, 97 (Cal. Ct. App. 1984).

^{174.} See, e.g., Jones, 565 U.S. 400; Bond, 529 U.S. at 338-39 (noting that agent felt bag in "exploratory manner"); Jardines, 133 S.Ct. at 1417 (concluding that purpose for which officers entered property determines whether dog-sniff was a search).

^{175.} See Jones, 565 U.S. at 408 n.5.

^{176.} See Cynthia Lee, Reasonableness with Teeth: The Future of Fourth Amendment Reasonableness Analysis, 81 MISS. L.J. 1133, 1176 (2012) (discerning the subjective intent of a government actor may be difficult, but proof of intent is required in other areas of law).

^{177.} See, e.g., Opperman, 428 U.S. at 376 (holding that inventory cannot be based on investigative motive); Corbin, 85 S.W.3d at 277 (holding that community caretaking function cannot be based on non-community caretaking motive); Lee, supra, note 176, at 1176.

^{178.} The obvious investigative motive demonstrated by the deputies' overflight in

Amendment is not subject to the results of a social media poll or popular election, but courts could and should consider both investigative motive and normative values in deciding whether the Fourth Amendment applies. Doing so would contribute to de-mystifying the threshold for constitutional protection and bringing cases more in line with the expectations of the public generally.

The current view of a "search" incorporates reasonable expectation of privacy, along with a version of trespass to property. But characterizing the state of affairs so simply masks the problems inherent in application of either trespass doctrine or expectation of privacy. "Trespass," for example, usually connotes a physical invasion of a space without consent. In Jones, Justice Scalia characterized placement of the GPS tracking device in this way: "The Government physically occupied private property for the purpose of obtaining information." According to the opinion, this was a "physical intrusion."

But in what sense did the attachment of a small tracking device constitute a physical intrusion? The device was affixed to the outside of the vehicle without invading its interior, ¹⁸² and would not have been considered a sufficient trespass under *Olmstead v. United States* ¹⁸³ or *Goldman v. United States* ¹⁸⁴ to amount to a search, even in the heyday of trespass doctrine. Those cases were discredited by *Katz*, ¹⁸⁵ but if the "Government physically occupied private property" in the *Jones* case, it did so in a very minimal way. The "invasiveness" or "intrusion" that occurred in *Jones* was not offensive because the government attached by magnets or adhesive a small box of miniature electronic components. ¹⁸⁶ It was an offense to Jones' privacy because it was

Ciraolo would have precluded any application of the plain-view (or perhaps, more appropriately "plane-view") doctrine if the "view" had been required to be inadvertent, as in Coolidge, 403 U.S. 443. Shortly after Ciraolo was decided, though, the plurality preference for inadvertence in plain-view situations—a preference that never gained much traction among the justices—was abandoned in Horton, 496 U.S. 128.

^{179.} Black's Law Dictionary includes as a definition of "trespass" the following: "An unlawful act committed against the person or property of another; esp., wrongful entry on another's real property." *Trespass*, BLACK'S LAW DICTIONARY (10th ed. 2014).

^{180.} See Jones, 565 U.S. at 404.

^{181.} See id. at 411.

^{182.} The device was attached to the undercarriage of Jones' Jeep Grand Cherokee. See id. at 402-03.

^{183.} See Olmstead, 277 U.S. 438.

^{184.} See 316 U.S. 129 (1942).

^{185.} See 389 U.S. at 353.

^{186.} In an interesting application of the post-Jones trespass test, the United States District Court for the Eastern District of Louisiana held that it was a "search" for investigators to swab the door handle of a suspect's vehicle in order to obtain a DNA sample for comparison purposes. See Schmidt v. Stassi, 250 F.Supp.3d 99 (E.D. La. 2017). Noting that the search "involved the physical touching" of the vehicle in a public parking lot that "did not damage the [vehicle] in any way," the court concluded that, contrary to the prior law of trespass to chattels, the better view is that trespass does not require damage to the owner's property. See id. at 103-04. For a discussion of this case and its implications, see Kerr, supra,

intended to provide the government large amounts of data about every movement of his vehicle over an extended period of time.¹⁸⁷ It was the degree of intrusion—not physical intrusion, but intrusion into the private life and movements of Mr. Jones—that readily leads to the normative judgment that the suspect was "searched." Arguably, Jones' expectation that his movements would not be tracked, at least not for as long or with such close scrutiny, was reasonable, although the Court chose not to rely on that mode of analysis. In fact, it ignored the Government's argument that the underbody of Jones' Jeep was not an area in which he had a reasonable expectation of privacy, preferring to rely for its holding on trespass doctrine.¹⁸⁸ If this was intended to avoid a contentious discussion about the areas of a vehicle in which one can expect privacy, it merely substituted for this discussion a much more controversial one. ¹⁸⁹

Borrowing a page from *Jardines*, the *Jones* majority acknowledged obliquely that the purpose to gather information is an indispensable element of a search. Although the Court did not explain in *Jones* the degree to which this factor mattered in the outcome, perhaps because of the majority's reliance on trespass, it nevertheless was said to be part of any search. ¹⁹⁰ *Jardines*, hardly a "new technology" case, nevertheless relied overtly on investigative intent in distinguishing the officers' approach to the house in that case from a non-search approach. ¹⁹¹

A. Adding Durability to Fourth Amendment Analysis

These recent cases suggest a better way to think about whether an investigative technique, and particularly one that is extraordinary or innovative, should be subjected to the usual Fourth Amendment requirements. This approach retains much of what the Court has done, but re-conceptualizes—"reshapes"—the analytical construct:

Reasonable expectation of privacy should continue to be the linchpin in deciding what it means to "search," but the present understanding of that concept should be reconfigured to infuse it with normative values, 192 and that

note 122.

^{187.} See Jones, 565 U.S. at 403-04 (stating that the device established vehicle's location within 50 to 100 feet, transmitted it via cell phone to a government computer, and relayed more than 2,000 pages of data over a four-week period).

^{188.} See id. at 406.

^{189.} See Schmidt, 250 F. Supp. 3d 99 (swabbing a door handle to obtain DNA held to be a search); Kerr, supra, note 122.

^{190.} See Jones, 565 U.S. at 408 n.5 (trespass alone does not qualify as a search; there must also be an attempt to find something or to obtain information).

^{191.} See Jardines, 133 S.Ct. at 1416-17 (implying license to enter suspect's porch depended on purpose for which officers entered).

^{192.} See DRESSLER ET AL., supra, note 9 (concluding that Justice Harlan's normative

should be done expressly and consistently. This may, and should, result in a departure from any rigid application of the "third-party doctrine." ¹⁹³

The investigative motive or intent of law enforcement must be a factor in deciding whether a "search" has occurred, although it should not be a dispositive factor.

Physical trespass in the traditional sense should be rejected as a per se determinative factor for "search." Instead, the underlying value of the trespass doctrine—the degree of invasiveness or intrusion suffered by the person subjected to the investigative technique—should be considered. 194

1. Back to the Future of Reasonableness Inquiry

When, as in *Bond*, the Court feels itself drawn to the conclusion that police conduct seems to have gone too far in exploring the person or effects of a suspect, it is time to say that more clearly and rely on that normative value more explicitly. The real trouble with reasonable expectation of privacy is that it doesn't put sufficient emphasis on a broad understanding of what is "reasonable." Reasonableness cannot be merely the product of a statistical analysis of the risk a person runs by the way in which he conducts himself or exposes his conduct, 195 although that kind of analysis plays an important role, too.

Adopting a more holistic view of reasonable expectation of privacy is faithful to the Court's shift in that direction in *Katz*. ¹⁹⁶ It also captures the public's sentiment in regulating police practices and promotes confidence that the values held by most of society—values that motivated adoption of the

approach to searches was correct).

^{193.} See Ohm, supra, note 56, at 1331-32 (eliminating the third-party doctrine is necessary but not sufficient).

^{194.} Professor Christopher Slobogin has explored the idea of considering intrusion in its many degrees, requiring more or less supporting suspicion to justify surveillance depending on the extent to which it intrudes upon or invades a person's privacy, something he has characterized as the "proportionality principle." See Slobogin, supra, note 132, at 210. My own suggestion regarding intrusion or invasiveness is simply that courts consider in deciding whether the government's conduct was a "search" whether, and to what extent, it invaded a privacy interest. I find considerable merit in Professor Slobogin's more sophisticated and elaborated notions of exactly which kinds of surveillance are more intrusive than others, and to what extent. Not all scholars, of course, believe this approach would be an improvement over the status quo. See Orin S. Kerr, Do We Need A New Fourth Amendment?, 107 MICH. L. REV. 951-52 (2009) (arguing that the proportionality principle is not a conceptual improvement over the current view of the Fourth Amendment).

^{195.} A purely statistical approach to reasonableness assumes that verifiable and accurate statistics for the conduct exist, that judges and lawyers know how to access and interpret these studies, and—most importantly—that the risks could be used with reasonable effectiveness by everyone subject to police surveillance.

^{196.} See 389 U.S. at 350 (holding that Fourth Amendment protects more than "constitutionally protected areas" but does not create a general right to privacy).

Fourth Amendment—are being upheld. Admittedly, the "fuzziness" of normative values is easily a match for the uncertainty of the meaning of "reasonableness," but confidence does not grow from pretending that something is fixed and knowable when it obviously is not. 198

To be sure, Justice Scalia's observation that nine lawyers are poorly equipped to decide on what the "living Constitution" means, captures a difficulty that is compounded by adding a layer of normative analysis. 199 Whether this makes the work of the trial court more difficult, though, is hard to evaluate. If the current reasonableness inquiry is hard, is a somewhat different reasonableness inquiry harder? This evaluative task seems particularly well suited to a group of ordinary citizens like the ones found on a jury. Ordinarily, suppression issues are decided initially by a trial judge, but in some states, the jury has "another bite at the apple" and can place its own view of governmental overreach in play. 200 Perhaps a better solution to deciding values-laden issues is to employ a mixed bench of professional and lay judges, but that mechanism, used in many other countries, 201 seems out of reach in the United States. Nevertheless, some role for lay judges or jurors in applying normative considerations to the current reasonableness determination may prove an effective way to enhance the credibility of outcomes.

^{197.} See Ohm, supra, note 56, at 1333 ("[T]he problem with the purely normative inquiry is its imprecision and variability.").

^{198.} See Pearlman & Lee, supra, note 57, at 755-56 (stating that the use of social media and networks have resulted in changing norms and differing views of what is "reasonable").

^{199.} See DRESSLER & ET AL., supra, note 9 (researching public attitudes would prevent the normative judgment to be solely that of the majority of the Supreme Court of the United States).

^{200.} For example, in Texas a defendant whose suppression motion and objection to the introduction of evidence allegedly seized unlawfully have been denied may nevertheless be entitled to a jury instruction requiring the jury to consider the lawfulness anew and not to consider any evidence that in the jury's view was obtained in violation of the law. See Tex. Crim. Proc. Code Ann. Art. 38.23(a) (2017):

In any case where the legal evidence raises an issue hereunder, the jury shall be instructed that if it believes, or has a reasonable doubt, that the evidence was obtained in violation of the provisions of this Article, then and in such event, the jury shall disregard any such evidence so obtained.

See also Madden v. State, 242 S.W.3d 504, 509-11 (Tex. Crim. App. 2007).

^{201.} See, e.g., Christoph Safferling, Towards An International Criminal Procedure 8 (2001) (describing reforms to the German criminal procedure in 1924 that brought about the abolition of the jury and the introduction of a mixed bench of lay and professional judges); Richard S. Frase, France, Criminal Procedure: A Worldwide Study 2d. ed. 219 (edited by Craig M. Bradley 2007) (detailing Assize courts which consist of three professional judges and nine lay judges sitting together in a mixed bench); Richard Vogler, A World View Of Criminal Justice Ch. 12 (2005) (reviewing the "European jury").

2. Giving Weight to Motive

Identifying the investigative motive or intent of law enforcement is much easier. Knowing how to use it, and the degree to which it should influence the outcome, is not. As *Jardines* and *Jones* demonstrate, the Court at least sometimes incorporates this factor into its decision making, notwithstanding its reluctance to delve into the motives of officers.²⁰² This occasional use of motive by the Court suggests that its use could be expanded to help define search.

This article began with the *Ciraolo* case, an instance of police surveillance using older technology, but using it in a somewhat unexpected way. The dissatisfaction with the *Ciraolo* opinion and holding often stems in large part from the blatant, focused, and intentional manner in which information about Mr. Ciraolo's back yard was obtained. The observation was not accidental or coincidental; it was a deliberate search²⁰³ for evidence of criminal activity. As the California Court of Appeal held,

From the perspective of defendant's reasonable expectation of privacy we deem it significant that the aerial surveillance of his backyard was not the result of a routine patrol conducted for any other legitimate law enforcement or public safety objective, but was undertaken for the specific purpose of observing this particular enclosure within defendant's curtilage.²⁰⁴

Intent to uncover such evidence cannot by itself define a "search" for Fourth Amendment purposes, of course. Were it to do so, every investigative activity, including parking beside a roadway to watch for speeding motorists, would be a "search" requiring some level of suspicion. If "search" were broadened to that extent, the Court's recourse might well be to tinker with, and lessen, the standards for reasonable suspicion and probable cause. On the other hand, throwing out the "baby" that motive represents is not justified by fear that excessively aggressive implementation by courts eventually will produce harm to the system of individualized suspicion.

It is time, as in *Jardines*, to recognize that motive matters. If that reasoning had been applied by the Supreme Court in *Ciraolo*, the result might or might not have been the same, but it would have been better received in either event. Investigative motive, like normative focus, is obviously a part of the calculation

^{202.} See supra, note 144 (bus passenger's bag handled in an "exploratory manner").

^{203.} I use the word "search" here without its constitutional meaning, but as a commonly-understood word describing what the officer in *Ciraolo* was doing when he looked down trying to see the marijuana crop. Any layperson would understand the deputy's actions to be a search, although the Supreme Court held that it was not. The divide between the ordinary meaning of "search" and its legal definition illustrates a significant problem with "reasonable expectation of privacy" and the usual unwillingness to consider investigative motive or intent.

^{204.} See People v. Ciraolo, 161 Cal. App. 3d 1081, 1089 (1984).

made by "the People" who are protected by the Fourth Amendment when they consider whether they are being "searched." It should be used by courts, too, and used in a more overt fashion.

Considering motive also seems consistent with the original meaning of the constitutional language. The impetus for the Fourth Amendment was deliberate invasion by government officers. To say that the investigative motive doesn't matter is to say that accidental discovery stands on the same constitutional footing as what is uncovered by intentional inquiry, and of course it does not.²⁰⁵ The Court usually is unconcerned with investigative motivation when it considers search; the focus is instead on the mental state of the person being searched.²⁰⁶ and whether that person had a subjective privacy expectation that was reasonable. Ironically, the Court has had no difficulty discerning the mental state of the person who has been searched, but finds it too difficult to delve into the mental state of the officer conducting the investigation.²⁰⁷ Investigative motive matters, and it is not unduly difficult to determine. Laypersons would be unlikely to consider the coincidental discovery of a controlled substance in a house where a warrant was being executed for stolen property to be the product of a "search" for the controlled substance. On the other hand, discovery of a controlled substance by an officer who entered the home on the pretext that she was checking for a possible gas leak would strike most people as a governmental search.²⁰⁸ Less formalism and more acknowledgment of what the citizenry understands the Constitution to mean would go a long way toward instilling confidence in the actions and institutions of government.

3. A New View of an Old Doctrine: Trespass

Physical trespass, when viewed in the narrow traditional sense of property rights, is not only an archaic factor, but is one that previously has been rejected

^{205.} See, e.g., Coolidge, 403 U.S. at 469-71 (holding inadvertent discovery required to dispense with warrant requirement in plain-view cases), overruled by Horton, 496 U.S. 128 (holding inadvertence not required for plain-view).

^{206.} Cf. Lee, *supra*, note 176, at 1176-77 (discerning the subjective intent of a government actor may be difficult, but proof of intent is required in other areas of law).

^{207.} Cf. Horton, 496 U.S. at 138 ("evenhanded law enforcement is best achieved by the application of objective standards of conduct, rather than standards that depend upon the subjective state of mind of the officer").

^{208.} The "pretext arrest" doctrine was alive and well for a period in Texas, and during that time Texas courts looked at facts and circumstances shedding light on the true motive of the arresting officer. See Black v. State, 739 S.W. 2d 240, 249 (Tex. Crim. App. 1987), overruled by Gordon v. State, 801 S.W. 2d 899 (Tex. Crim. App. 1990) (concluding that traffic stop by homicide detectives who wanted to question driver about a killing was a pretext stop rather than a stop for traffic violations).

for very good reason.²⁰⁹ "Search" has more to do with privacy than it has to do with security, a concern more properly addressed by the "seizure" component of the Fourth Amendment.²¹⁰ Seen in the light of privacy concerns rather than property security concerns, the problem in *Jones*, the GPS-tracking case, was not that the government invaded the physical space of the suspect, but rather that its use of the device invaded the *privacy* of Mr. Jones by tracking and relaying to law enforcement great quantities of data about his movements, data that realistically could not have been obtained through mere observation.

Similarly, in *Ciraolo* one might say that no physical trespass occurred when the deputy flew over the marijuana patch, but that misses the constitutional point. Ciraolo's privacy was invaded, even if his backyard was not, ²¹¹ a point that the Court grasped and applied in *Katz* when it held that the listening device attached to the outside of a public phone booth in order to capture the suspect's conversation was a search within the meaning of the Fourth Amendment. *Ciraolo* isn't unsatisfactory because the opinion's analysis focused on privacy interests rather than physical intrusion. It is unsatisfactory because it ignores many of the considerations that a full evaluation of invasion of privacy would entail. ²¹²

"Trespass" is important only insofar as it encompasses "invasiveness." The Framers could not have been so concerned about the breaking of the invisible barrier of property rights surrounding their homes and places of work as they were about the intrusion into or invasion of private places, papers, conversations, and effects. When the drug-sniffing dog was taken onto the porch in *Jardines* to detect controlled substances within the residence, it was not the entry onto the owner's property that offended the Fourth Amendment privacy protections. It was the deliberate, and successful, attempt by the government to find out what was happening within the home—the virtual invasion of that space we all expect to be free from unwarranted snooping. In this sense, Justice Scalia's opinion in *Kyllo* correctly focused on the core issue, not whether the information was obtained from outside the property bounds or by intruding onto the suspect's property, but by worrying about what the

^{209.} See Ciraolo, 476 U.S. at 209 (detailing that the marijuana in defendant's yard was identified by officers flying over at an altitude of 1,000 feet).

^{210.} See Thomas K. Clancy, What Does the Fourth Amendment Protect: Property, Privacy, or Security, 33 WAKE FOREST L. REV. 307, 344-50 (1998) (arguing that guarantee that seizures be reasonable, as in Terry v. Ohio, involves the protection of security, but privacy remains the principal object of the Fourth Amendment).

^{211.} It might be said that some "virtual trespass" occurred, either because obtaining visual access to a protected space constituted a kind of trespass, or because the aircraft invaded physical space above the land that was "owned" by Ciraolo. The latter argument is addressed in the Court's opinion by its discussion of public, navigable airspace, airspace to which Mr. Ciraolo had no exclusive right of access. See Ciraolo, 476 U.S. at 213-14.

^{212.} In respect to *Ciraolo*, the *Katz* holding has been characterized as "impotent." *See* Maclin, *supra*, note 15, at 82.

thermal-imager disclosed about what was happening inside the home.²¹³ Danny Kyllo might reasonably have expected that the activities in his residence would remain private from the snooping eye of the government's infrared detection device, even though the government did not physically trespass any more than did the deputy in *Ciraolo*. Although the Court did not rely on investigative motive in reaching its conclusion that Kyllo's home was searched unlawfully, if that factor had been considered, it clearly would have weighed on the suspect's side of the balance.

For these reasons, physical trespass, by itself, should not determine whether a search has occurred. Relying on trespass, even in part, shifts the focus of the Fourth Amendment from privacy to a surrogate for privacy that sometimes misses the point of the inquiry completely. Only to the extent that trespass reveals the degree of invasion or intrusion into a private place should it have value in deciding whether a search has occurred, and whether constitutional privacy protections apply.

4. The Misguided "Public Use" Approach

The constitutional problem posed by rapidly changing investigative techniques, many of which are made possible by technological advances, cannot be solved entirely by resort to doctrines and modes of analysis developed in simpler times. The "general public use" formula used by Justice Scalia in *Kyllo*, and earlier by Chief Justice Burger in *Dow Chemical*, represents an attempt to address this problem by focusing on the availability and sophistication of surveillance technology rather than on the way it is used or the degree to which it invades privacy. Because "general public use" is an uncertain and moving target, ²¹⁴ and because in any case it is one the Court will try to hit only after the device in question has been in use for years, it is unlikely that decisions employing this standard will satisfy or provide useful guidance for evaluating the next advance in technology. ²¹⁵ *Kyllo*'s appeal is not based on the "general public use" analysis, but instead upon its reliance on

^{213.} Writing in 2002 on the interplay between *Katz*, trespass, and technology, Professor Tracey Maclin observed: "Even if *Katz* had not reversed the trespass rule, law enforcement investigative methods, with the aid of technology, were advancing at such a rapid pace that the government could obtain various types of information without a physical intrusion into a constitutionally protected area." *Id.* at 88.

^{214.} See Derek T. Conom, Sense-Enhancing Technology and the Search in the Wake of Kyllo v. United States: Will Prevalence Kill Privacy?, 41 WILLAMETTE L. REV. 749, 773 (2005) (arguing that general public use analysis poses a risk of immersing judges in a morass of facts concerning price, availability, and level of consumer demand in every case in which a sense-enhancing device is used); Ohm, supra, note 56, at 1344 (stating that every technology is a moving target).

^{215.} See Maclin, supra, note 15, at 105 (concluding that whether a device is one in "general public use" should have no impact on Fourth Amendment analysis).

widely-held notions of what should remain beyond the prying eyes of law enforcement.

B. Focusing on First Principles

A more enduring way of thinking about what it means to "search" will come, not by looking for a common characteristic of "new technology," but by reconsidering the basic premises on which the Fourth Amendment rests. Not a new test for devices, but a new, realistic understanding of the privacy expectations that are shared within our society, will allow the Court to more faithfully honor the history and language of the Fourth Amendment. Applying this changing standard will not be easy in some cases, but it will avoid the artificiality inherent in the Court's use of new rules, new factors, and new catchphrases for new situations.

What is required in this rapidly developing environment is a new kind of judicial activism that is rooted in the motivating principles of the Fourth Amendment. This form of activism does not rely on the creation of ad hoc rules to address the challenge of each piece of emerging technology. It avoids constant tinkering with search doctrine and the confusion that is generated by idiosyncratic decisions left unconnected by a unifying privacy principle. The judicial activism that is necessary to keep the Fourth Amendment effective is not the kind of activism that is designed to keep the constitutional language current. For all of his belief in originalism, Justice Scalia's adoption of a "general public use" test and his re-creation of the trespass doctrine constituted a substantial and unexplained departure from the doctrine that existed when he first assumed the point position for the Court on Fourth Amendment issues.

The kind of judicial activism that will allow the Court to satisfactorily determine whether as-yet unknown surveillance devices and techniques are "searches" is the kind of activism that recognizes and respects the underlying principles of privacy inherent in the Fourth Amendment and the expectations of the people it protects. It requires the Court to maintain the commitment to consider what people expect to be private, even if those expectations are not always empirically supportable. It requires the Court to understand that investigative motive or intent is not irrelevant, precisely because it is part of the way people understand what it means to "search." And it requires the Court always to evaluate the degree to which the government's actions invaded the privacy of the citizen, and to recognize that an invasion need not be physical, although it might be.

This view of the Fourth Amendment is a product of "activism" only in the sense that some of the disparate factors of which it is comprised have been eschewed in previous decisions or have been used in a more limited fashion. The activism needed to apply this more expansive approach to privacy includes a willingness to explicitly and thoroughly explain how each factor influences the outcome in the particular case before the Court. That outcome is not

determined by whether the government's latest surveillance device was based on a satellite, a drone, an airplane, or a device attached to a car bumper. It should not matter whether the surveillance was carried out by "old" technology—a dog's nose, a human hand, a flashlight or binoculars, or a fixed-wing aircraft—or by "new" technology that is widely available; available but in limited circulation; available only to military and law enforcement personnel; or still in the developmental stage and therefore essentially unavailable. Virtual searches, probing of digital data, accessing data that is stored on a hard drive or transmitted via microwave or satellite link, all should be analyzed in the same way because all of these involve the same core concern: Did the government acquire information in the course of its investigation in a way that violated the privacy rights of the suspect? That question is answered by resort to the fundamental values of the Fourth Amendment, and not by the changing nature of the means used to acquire the information.

CONCLUSION

When law chases technology, it is doomed never to catch up. At no time in our history has this been more true than it is today. The slow and incremental changes in investigative techniques developed during the Nineteenth and early-Twentieth centuries were accommodated with relative ease by the Supreme Court's limited view of the Fourth Amendment's reach. The explosion of litigation engendered by the extension of the exclusionary remedy in the early 1960s, however, coincided with the technology revolution ushered in by the space race, the Cold War, and rapid scientific advances. As law enforcement agencies increasingly adopted the surveillance and investigative tools that rapidly became available, the use of those devices was challenged in ways that pushed the Supreme Court to fashion a wholly different approach to constitutional privacy protections.

Reasonable expectation of privacy was not an interpretive variation on the traditional property-based understanding of the Fourth Amendment. It was the product of a complete re-thinking of what the Constitution was intended to protect. As a concept, it has proven itself relatively durable, and it retains at its core a bundle of values that can continue to guide the Court as it faces an onslaught of novel legal issues driven by the relentless advance of technology.

The determination of "reasonable expectation" cannot continue, however, to ignore the ways in which people commonly view what is and isn't private. Instead, the Fourth Amendment must be seen as an expression of shared values, no matter how imperfectly courts are able to ascertain those values. Empiricism and social science can play a useful role in this endeavor, as can the appropriate use of lay fact-finders. The inquiry must include consideration of the same factors that are used by people who are not judges or constitutional scholars: What were the police trying to do? Were they searching for evidence? Were their techniques excessively invasive or intrusive?

Viewed in this light, privacy protections do not depend on the kind of device that is used, but upon the motive of the user and the expectations of society. The quest for a new bright-line test to address each technological development is futile, whether it takes the guise of "general public use" or "physical trespass." Reliance on core principles of the Fourth Amendment, however, requires no continuous tinkering. The Fourth Amendment need not be shaped, re-shaped, or shape-shifted with each new application. It need only be applied to protect the right of "the people" to be secure in our persons, houses, papers, and effects from government searches that those people would consider unreasonable.

