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Andrew Guthrie Ferguson

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PERSONAL CURTILAGE: FOURTH AMENDMENT SECURITY IN PUBLIC

ANDREW GUTHRIE FERGUSON*

ABSTRACT

Do citizens have any Fourth Amendment protection from sense-enhancing surveillance technologies in public? This Article engages a timely question as new surveillance technologies have redefined expectations of privacy in public spaces. It proposes a new theory of Fourth Amendment security based on the ancient theory of curtilage protection for private property. Curtilage has long been understood as a legal fiction that expands the protection of the home beyond the formal structures of the house. Based on custom and law protecting against both nosy neighbors and the government, curtilage was defined by the actions the property owner took to signal a protected space. In simple terms, by building a wall around one’s house, the property owner marked out an area of private control. So, too, the theory of personal curtilage turns on persons being able to control the

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protected areas of their lives in public by similarly signifying that an area is meant to be secure from others.

This Article develops a theory of personal curtilage built on four overlapping foundational principles. First, persons can build a constitutionally protected space secure from governmental surveillance in public. Second, to claim this space as secure from governmental surveillance, the person must affirmatively mark that space in some symbolic manner. Third, these spaces must be related to areas of personal autonomy or intimate connection, be it personal, familial, or associational. Fourth, these contested spaces—like traditional curtilage—will be evaluated by objectively balancing these factors to determine if a Fourth Amendment search has occurred. Adapting the framework of traditional trespass, an intrusion by sense-enhancing technologies into this protected personal curtilage would be a search for Fourth Amendment purposes. The Article concludes that the theory of personal curtilage improves and clarifies the existing Fourth Amendment doctrine and offers a new framework for future cases. It also highlights the need for a new vision of trespass to address omnipresent sense-enhancing surveillance technologies.
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“The Fourth Amendment provides that ‘the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated....’ This inestimable right of personal security belongs as much to the citizen on the streets of our cities as to the homeowner closeted in his study to dispose of his secret affairs.”

INTRODUCTION

A neighborhood is targeted for enhanced police surveillance: drones fly overhead, video cameras record each intersection, license plate readers scan each automobile, facial recognition devices monitor particular buildings, and aural surveillance records conversations on the street. If an individual enters that public space, does the Fourth Amendment offer any protection from such government surveillance? Prior to the Supreme Court’s 2012 decision in United States v. Jones, the answer would have been “no,” the Fourth Amendment does not protect what one has knowingly exposed to the public. After Jones, the answer is less

certain, as a majority of Justices appear to be troubled by the aggregation of collected public information, even information knowingly exposed to the public.9

The question remains: does a space, constitutionally protected from technologically enhanced surveillance, exist in public? And, if so, how should it be defined consistent with the text, history, and theory of the Fourth Amendment?10 This Article engages a timely question as new surveillance technologies have redefined expectations of privacy in public spaces.11 It examines an open question as the Supreme Court has been unable to agree on a framework for protecting people in public.12

In response to these questions, this Article proposes a new theory of Fourth Amendment security based on the ancient theory of curtilage for private property.13 Curtilage has long been understood as a legal fiction that expands the protection of the home beyond the formal structures of the house.14 Curtilage recognizes a buffer zone beyond the four walls of the home that deserves protection even in areas observable to the public.15 Based on custom and law protecting against both nosy neighbors and the

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11. Andrew E. Taslitz, The Fourth Amendment in the Twenty-First Century: Technology, Privacy, and Human Emotions, 65 Law & Contemp. Probs. 125, 169 (2002) (“Privacy, when defined as the boundary-maintenance necessary to individual and group definition, recognizes—in a way that the Supreme Court and many commentators do not—that the ‘private’ can happen in ‘public.’ We do not shed all privacy expectations simply because we walk on a public street, or enter a classroom, or attend a ball game.”) (citation omitted).
12. See infra Part I.B. It is also a well-considered problem, as many Fourth Amendment scholars have offered thoughtful analyses of this doctrinally difficult problem.
13. See infra Part II.
15. See Oliver, 466 U.S. at 180 (defining curtilage as “the land immediately surrounding and associated with the home” (citation omitted)); United States v. Redmon, 138 F.3d 1109, 1112 (7th Cir. 1998) (en banc) (defining curtilage as “an imaginary boundary line between privacy and accessibility to the public”).
government, courts defined curtilage by the actions the property owner took to signal a protected space. In simple terms, by building a wall around one’s house, the property owner marked out an area of private control. Similarly, the theory of personal curtilage turns on persons being able to control the constitutionally protected areas of their lives in public by signifying that they intend for an area to be secure from physical and sense-enhancing invasion.

Why focus on curtilage? First, Justice Scalia’s majority opinion in Jones gave new life to the idea that trespass is still an influential Fourth Amendment theory. The majority held that if police trespass on personal property—an “effect” within the framework of the Fourth Amendment—a search occurs. This is so even if third parties can observe the “effect”—the car—in public and even if it produces only public information. Second, Justice Scalia reiterated the centrality of curtilage in Florida v. Jardines, holding that a dog sniff on the curtilage of a home was a search for Fourth Amendment purposes. As curtilage has always been a doctrine tied to trespass-based property theories, studying it in light of new technologies provides new insights. At the same time, the concurring Justices

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16. Amelia L. Diedrich, Note, Secure in Their Yards? Curtilage, Technology, and the Aggravation of the Poverty Exception to the Fourth Amendment, 39 HASTINGS CONST. L.Q. 297, 300 (2011) (“As a means of defense in England’s ‘early times,’ it was customary for home owners to surround their home and related buildings with a ‘substantial wall.’ The resulting area inside the wall and outside the home was known as the curtilage.”).

17. Blackstone explained: “And if the barn, stable or warehouse be parcel of the mansion-house, though not under the same roof or contiguous, a burglary may be committed therein; for the capital house protects and privileges all its [sic] branches and appurtenants, if within the curtilage or homestall.” 4 WILLIAM BLACKSTONE, COMMENTARIES *220, *225.

18. United States v. Jones, 132 S. Ct. 945, 949 (2012) (“Consistent with this understanding, our Fourth Amendment jurisprudence was tied to common-law trespass, at least until the latter half of the 20th century.” (citations omitted)). But see Orin S. Kerr, The Curious History of Fourth Amendment Searches, 1 SUP. CT. REV. 67, 67-69 (2012) (arguing that trespass did not control early Fourth Amendment cases).


21. Florida v. Jardines, 133 S. Ct. 1409, 1414-15 (2013) (“The officers were gathering information in an area belonging to Jardines and immediately surrounding his house-in the curtilage of the house, which we have held enjoys protection as part of the home itself.”).

22. See infra Part III. Trespass, as will be developed, can result when sense-enhancing surveillance devices are utilized to obtain information that would not ordinarily be obtainable
in *Jones* expressed dissatisfaction with a limited property-based conception of trespass, seeking to expand Fourth Amendment protections to people in public. 23 Although not agreeing on a framework, at least five Justices in *Jones* acknowledged that new surveillance technologies required new Fourth Amendment thinking to address privacy concerns in public.24

As this Article will develop, curtilage provides a definitional tool rooted in the common law, and yet adaptable to the surveillance age. First, the creation of spaces of curtilage recognized that profoundly private events occurred in public.25 Much of the deep respect for this space involved its ties to intimate associations of family, friends, private worship, and personal habits even in observable areas.26 Second, curtilage focused as much on security as privacy, marking out a defensive space against government invasion.27 Third, curtilage was a doctrine rooted in custom and law. 28 Although one could sue for trespass in courts, the harm was a violation not only of the rules of property, but also the rules of social custom.29 The metaphorical wall did not merely keep out prying eyes, but symbolically informed those eyes of when and

through human senses.

23. *See Jones*, 132 S. Ct. at 957 (Sotomayor, J., concurring); id. at 957-58 (Alito, J., concurring).

24. *Id.* at 947.

25. *See Oliver v. United States*, 466 U.S. 170, 180 (1984) (defining curtilage as “the area to which extends the intimate activity associated with the 'sanctity of a man's home' ” (citation omitted)).


27. *See infra Part III.A.*

28. *Wellford v. Commonwealth*, 315 S.E.2d 235, 238 (Va. 1984) (“In England the curtilage seems to have included only the buildings within the inner fence or yard, because there, in early times, for defense, the custom was to enclose such place with a substantial wall.... In this country, however, such walls or fences, in many cases, do not exist, so that with us the curtilage includes the cluster of buildings constituting the habitation or dwelling place, whether enclosed with an inner fence or not.” (citations omitted) (quoting *Bare v. Commonwealth*, 94 S.E. 168, 172 (Va. 1917))).

where they needed to stop looking.\footnote{Again, a wall did not make it physically impossible to spy on a house, just socially and legally wrong to cross the threshold to invade private activities.} Fourth, curtilage shifted the burden of creating protected spaces to the individual, and not the government. It was the individual who would build the wall or fence around the property.\footnote{See infra notes 277-281 and accompanying text.} Finally, it was a limited space of protection. Curtilage expanded the scope of personal security, but only slightly, thus carving out some protected space in public, but not so much as to upset the balance of existing law.\footnote{See infra Part II.D.}

This Article applies the theory of Fourth Amendment curtilage to persons acting in public.\footnote{See infra Part IV.} It is necessarily an inexact application, but a theory that offers several insights about the modern Fourth Amendment doctrine. First, an analysis of Fourth Amendment curtilage recognizes that the prevailing binary analysis of a greater protection in the home and a lesser protection outside of the home rests on an outdated foundation.\footnote{See Stephanie M. Stern, The Inviolate Home: Housing Exceptionalism in the Fourth Amendment, 95 CORNELL L. REV. 905, 906-08 (2010).} New technologies can see, hear, sense, and invade the home and public space with equal ease. Traditional public/private boundaries no longer guarantee privacy protection. Curtilage thus exists as a gray area offering a middle range of privacy. Second, in emphasizing security—“[t]he right ... to be secure”\footnote{U.S. CONST. amend. IV.}—as the operative language in the Fourth Amendment, a curtilage-based theory offers a better frame of analysis than an “expectation of privacy.”\footnote{Katz v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).} As other scholars have noted, the Fourth Amendment by its plain language protects the right to be “secure,” not the right to privacy.\footnote{E.g., Clancy, supra note 10, at 308.} As new technologies make old expectations of privacy obsolete, a new focus is needed. Finally, this theory shifts the power of who gets to define the protected space.\footnote{Again, as this Article will discuss, the shift gives the individual seeking security more power to define areas secure against government surveillance.} Instead of a court divining what society considers an objectively “reasonable” expectation of privacy,\footnote{Katz, 389 U.S. at 361 (Harlan, J., concurring).} based on little more than the court’s own
vision of such an expectation, now courts might look to steps the individual took to establish the protected space.

To be clear, the concept of “personal curtilage” is as much a legal fiction as traditional property-based curtilage, but as this Article will develop, both are necessary fictions that allow a balance between personal and societal security. In a new technological age of aggressive surveillance, personal curtilage carves out a defensible space of protection. It is a space controlled by the individual and dependent on the individual’s own affirmative action for protection. It is a limited space that may not cover everything exposed to the public, but may also be more protective than the current doctrine. Finally, it requires a new understanding of Fourth Amendment trespass that maps sense-enhancing technological invasions as equivalent to physical invasions in an earlier era.

Part I of this Article sets out the current doctrinal uncertainty in the Fourth Amendment. Although much insightful scholarship exists on the subject, Fourth Amendment protections in public remain unclear. The Supreme Court’s most recent foray into the subject in United States v. Jones has only added to the uncertainty. Part I argues that a new framework is necessary to address the unanswered questions of where and how a constitutionally protected space can exist in public.

Part II looks at the concept of Fourth Amendment curtilage as a definitional frame to create a parallel space in public. In part, the attraction of using curtilage as a model is that it exists as an acknowledged legal fiction created precisely because traditional concepts of property were too restrictive. It argues that certain

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42. 132 S. Ct. 945, 951 (2012); see also Slobogin, supra note 20, at 1-4.

43. Constitutional curtilage was created to expand the space of the house in the
actions in public view are still private, or at least should be secure from physical or sense-enhancing invasions. It also recognizes that persons have the power to shape law and custom about how to define the boundaries of that protection. The Supreme Court’s discussion of curtilage specifically includes an analysis of the uses to which the property was put and the steps taken to preserve the area as private.44

Part III defines the theory of personal curtilage. Building off the argument that security and not privacy is the better foundation to structure Fourth Amendment protections, it focuses on individual actions that mark out areas of protected space to further the autonomy interests of individuals. The theory of personal curtilage rests on four overlapping foundational principles. First, persons in public should be able to carve out constitutionally protected areas secure from government surveillance.45 This constitutionally protected area may be limited, but it exists.46 Second, in order to claim that security, persons must affirmatively act to mark out the area of security.47 This marker involves both a claim against the government and other individuals similarly situated.48 Third, these areas of Fourth Amendment security must be related to areas of personal activity similar to the focus on intimate detail around the home.49 Finally, personal curtilage works within the existing Fourth Amendment framework for many situations in public. The reason individuals can be secure in what they carry in closed containers, or under their clothing, is that law and custom respect a zone of

recognition that certain areas still deserved protection even outside the four walls of the house. See supra note 25.

46. Katz v. United States, 389 U.S. 347, 352 (1967). For example, a person in public may be able to secure what he says to another person, but not the identity of whom they are speaking with. See Smith v. Maryland, 442 U.S. 735, 742 (1979) (finding no expectation of privacy in phone numbers dialed). Like Katz, an individual in a public phone booth could claim an expectation of security in the conversation, even if one could plainly see him in public. 389 U.S. at 352.
47. See infra Part III.B.
48. Like building a wall or, as in Katz, shutting the phone booth door, these symbolic markers help define the area of security.
49. See Dunn, 480 U.S. at 301 (“[C]urtilage is so intimately tied to the home itself that it should be placed under the home’s ‘umbrella’ of Fourth Amendment protection.”).
security from surveillance in what we choose to conceal on our persons, even in public. This Part argues first that a zone of security should exist in public for individuals, and then offers an analytical framework to define that zone.

Part IV applies the theory of personal curtilage to the hypothetical surveillance state set out at the beginning of the Article. It concludes that the development of personal curtilage improves and clarifies the existing Fourth Amendment uncertainty and offers a framework for future cases. It also addresses the need for a new vision of trespass to address the potential of non-physically invasive technological surveillance.

Part V addresses a few concerns with the proposal. As with any new theory, questions in application and tensions with existing law arise. As this Article will develop, however, these tensions are revealing of the strength of the personal curtilage approach and will serve to highlight concerns for courts attempting to address the issue of technological surveillance in public.

I. A DOCTRINAL MUDDLE: FOURTH AMENDMENT PROTECTIONS IN PUBLIC

The puzzle of the Fourth Amendment is that courts and scholars keep trying to make the legal pieces fit without any agreed vision of its history or purpose. Of course, historical understandings inform

50. Harper, supra note 29, at 1387, 1398-99 (“But when a person walking on the street carries an aspirin tablet in a coat pocket, that fact is not available to anyone. The physical barrier of the fabric prevents others from gaining access to that information.”). Although the term “personal curtilage” has not been used, society has accepted that a person’s action of concealing a private item in a briefcase or in a pocket is deserving of Fourth Amendment respect, even if it were technologically possible to x-ray the person or otherwise discover what he was carrying.

51. It should be noted that the two steps are separate, and one could well agree that a zone of security exists without necessarily accepting the definitional framework proposed.

general principles, but present realities of a professional police force and physics-defying technologies make reliance on any original meaning a guessing game. Textual ambiguities, such as “probable cause” or “unreasonable,” only increase the uncertainty, as judges can reframe or reconstitute the terms of art to match a prevailing judicial philosophy. And the longstanding judicial tensions between the criminal procedure theories of the Warren Court, and the Rehnquist and now the Roberts Courts, have resulted in an inconsistent, unanchored patchwork of cases filled with doctrinal gaps and without any coherent theory.

Perhaps the only area of agreement among courts and scholars is that the current Fourth Amendment is a muddle of a doctrine. Attacked as “subjective and unpredictable,” “riddled with inconsistency and incoherence,” and analytically devoid of an overarching structure, one commentator has described the current doctrine as

54. Fretty, supra note 5, at 434-35.
55. “How do we know what society is prepared to accept as reasonable? Because there is no straightforward answer to this question, ‘reasonable’ has largely come to mean what a majority of the Supreme Court Justices says is reasonable.” ROBERT M. BLOOM, SEARCHES, SEIZURES, AND WARRANTS 46 (2003).
56. Justice Scalia has complained that the Court’s reasonable expectation of privacy test essentially boils down to “those expectations of privacy that this Court considers reasonable.” Minnesota v. Carter, 525 U.S. 83, 97 (1998) (Scalia, J., concurring).
58. Kyllo v. United States, 533 U.S. 27, 34 (2001) (“The Katz test—whether the individual has an expectation of privacy that society is prepared to recognize as reasonable—has often been criticized as circular, and hence subjective and unpredictable.”).
59. Daniel J. Solove, Fourth Amendment Pragmatism, 51 B.C. L. REV. 1511, 1511 (2010) (“The reasonable expectation of privacy test has led to a contentious jurisprudence that is riddled with inconsistency and incoherence.”).
60. Tomkovicz, supra note 10, at 347 (“The development of the reasonable expectation of privacy threshold doctrine has occurred in a piecemeal, ad hoc fashion. No overarching scheme or analytical framework is evident in the Court’s threshold decisions.”).
a Rube Goldberg contraption—a Rube Goldberg contraption—an unnecessarily complex, odd, and yet fascinating to study and observe. As this Article proposes a new piece of the puzzle for protections of people in public, one must review the general themes of Fourth Amendment theory. These themes of constitutionally protected areas, trespass theory, and the reasonable expectation of privacy all inform—and are incorporated into—the theory of personal curtilage. This Part will briefly summarize each theme in turn, with a specific focus on how the Fourth Amendment protects persons in public.

A. Past Tensions: The Fourth Amendment in Flux

The early history of the Fourth Amendment offers few clues about the scope of its protection. Plainly at the time of the Founding, invasive surveillance technology did not exist. More generally, of course, it is well settled that the Framers greatly valued intellectual freedom, physical liberty, and personal property. It is equally certain that a fear of arbitrary overreaching government action motivated the passage of the Fourth Amendment. But,

62. It is this protection in public that raises difficult questions for the Fourth Amendment. As Anthony G. Amsterdam wrote years ago:

[S]o far as I am presently advised of the state of the mechanical arts—anyone can protect himself against surveillance by retiring to the cellar, cloaking all the windows with thick caulking, turning off the lights and remaining absolutely quiet. This much withdrawal is not required in order to claim the benefit of the amendment because, if it were, the amendment’s benefit would be too stingy to preserve the kind of open society to which we are committed and in which the amendment is supposed to function.

63. See, e.g., Ex parte Jackson, 96 U.S. 727, 733 (1877) (extending Fourth Amendment protection to letters and sealed packages partly based on a First Amendment theory).
64. See Clancy, supra note 53, at 989-90.
65. See Dow Chem. Co. v. United States, 476 U.S. 227, 240 (1986) (Powell, J., dissenting) (“The Fourth Amendment protects private citizens from arbitrary surveillance by their Government.”); Boyd v. United States, 116 U.S. 616, 625 (1886) (“The practice had obtained in the colonies of issuing writs of assistance to the revenue officers, empowering them, in their discretion, to search suspected places for smuggled goods, which James Otis pronounced ‘the worst instrument of arbitrary power, the most destructive of English liberty, and the fundamental principles of law, that ever was found in an English law book;’ since they placed ‘the liberty of every man in the hands of every petty officer.’” (citations omitted)).
as there were almost no Fourth Amendment opinions during the first century of the United States, we are left with broad themes, but few particulars on which to base a theory.

In 1886, the Supreme Court decided its first significant Fourth Amendment case in *Boyd v. United States*, a broadly sweeping opinion that linked personal security, property, and the forced compulsion of documents into a newly protective view of the Fourth and Fifth Amendments. In *Boyd* addressed a court order that required the production of incriminating documents involving the commercial sale of plate glass. Invoking the Fourth and Fifth Amendments, the Court held that a court order compelling a commercial business to produce documents of a transactional nature, even without any physical or actual search or seizure, would violate the Fourth Amendment. The Court’s language went beyond property or papers, reaching personal security and liberty:

> The principles laid down in this opinion affect the very essence of constitutional liberty and security. They reach farther than the concrete form of the case then before the court, with its adventitious circumstances; they apply to all invasions on the part of the government and its employees of the sanctity of a man’s home and the privacies of life. It is not the breaking of his doors, and the rummaging of his drawers, that constitutes the essence of the offence; but it is the invasion of his indefeasible right of personal security, personal liberty and private property, where that right has never been forfeited by his conviction of some public offence.

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67. *Id.* at 618.
68. *Id.* at 633 (“We have already noticed the intimate relation between the two amendments. They throw great light on each other. For the ‘unreasonable searches and seizures’ condemned in the Fourth Amendment are almost always made for the purpose of compelling a man to give evidence against himself, which in criminal cases is condemned in the Fifth Amendment; and compelling a man ‘in a criminal case to be a witness against himself,’ which is condemned in the Fifth Amendment, throws light on the question as to what is an ‘unreasonable search and seizure’ within the meaning of the Fourth Amendment.”).
69. *Id.* at 622 (“It is our opinion, therefore, that a compulsory production of a man’s private papers to establish a criminal charge against him, or to forfeit his property, is within the scope of the Fourth Amendment to the Constitution, in all cases in which a search and seizure would be; because it is a material ingredient, and effects the sole object and purpose of search and seizure.”).
70. *Id.* at 630.
The Court’s decision was also notable for a few other reasons relevant to this Article. First, the Court did not require a physically invasive search to trigger the Fourth Amendment.\(^{71}\) Rather, the Court expressed concern about any law enforcement technique that forced individuals to reveal personal information.\(^{72}\) Second, the Fourth Amendment covered information that made little objective claim to personal privacy. At issue were records of business transactions that had little personal value. Third, the protections went beyond private papers or effects to a broader vision of “personal security.”\(^{73}\)

The evolution of Fourth Amendment doctrine, thus, began with a nonphysical search of not really private information, based on privileging the idea of personal security.\(^{74}\) As we will see, this broad vision of the Fourth Amendment resonates when thinking about its application in a technologically invasive world.

\(^{71}\) The search was the result of the equivalent of a court order. \textit{Id.} at 621-22.

\(^{72}\) In this way, many view \textit{Boyd} more as a Fifth Amendment case rather than a Fourth Amendment case. See, e.g., Suzanne Rosenthal Bruckley, \textit{Now It’s Personal: Withdrawing the Fifth Amendment’s Content-Based Protection for All Private Papers in United States v. Dow}, 60 BROOK. L. REV. 553, 556-57 (1994); Lance Cole, \textit{The Fifth Amendment and Compelled Production of Personal Documents after United States v. Hubbell—New Protection for Private Papers?}, 29 AM. J. CRIM. L. 123, 131 (2002); Richard A. Nagareda, \textit{Compulsion “To Be a Witness” and the Resurrection of Boyd}, 74 N.Y.U. L. REV. 1575, 1578 (1999). \textit{Boyd} also had a limited Fourth Amendment life in practice, although commentators still cite it with some regularity. See, e.g., Christopher Slobogin, \textit{Subpoenas and Privacy}, 54 DePaul L. REV. 805, 814 (2005) ("Within twenty years the Court had reversed itself. In the 1906 case of \textit{Hale v. Henkel}, the defendant corporation, suspected of antitrust violations, relied on \textit{Boyd} in arguing that a grand jury subpoena for its documents violated both the Fifth and Fourth Amendments. In finding for the government, the Court rejected the interpretation of the Fifth Amendment that it had adopted in \textit{Boyd}, and limited the Fourth Amendment’s relevance in subpoena cases to a prohibition of overbroad requests." (citations omitted)).

\(^{73}\) See \textit{infra} Part III.

\(^{74}\) See \textit{Boyd}, 116 U.S. at 635 (“Though the proceeding in question is divested of many of the aggravating incidents of actual search and seizure, yet, as before said, it contains their substance and essence, and effects their substantial purpose. It may be that it is the obnoxious thing in its mildest and least repulsive form; but illegitimate and unconstitutional practices get their first footing in that way, namely, by silent approaches and slight deviations from legal modes of procedure. This can only be obviated by adhering to the rule that constitutional provisions for the security of person and property should be liberally construed.”).
1. Protected Interests/Trespass Theory

The Court soon abandoned Boyd’s expansive reach with more limited interpretations of the Fourth Amendment. In what is understood as the first era of modern Fourth Amendment thinking, the Supreme Court adopted a property-based approach that looked at physical invasions of constitutionally protected interests. These interests included the textually mentioned “persons,” “houses,” “papers,” and “effects” with a heavy emphasis on the heightened protection of what Boyd termed the “sacred and incommunicable” right of property.

This property-focused understanding and its limitations are best illustrated in the debate between Chief Justice Taft and Justice Brandeis in Olmstead v. United States. As a matter of doctrine, Olmstead determined that for there to be a search, the government must interfere with a person, home, paper, or effect in a trespassory manner. At issue in Olmstead was an electronic wiretap that recorded conversations of a conspiracy to import alcohol against existing prohibition laws. Chief Justice Taft, writing for the majority, reasoned that electronic eavesdropping did not trespass on


76. Gatewood, supra note 41, at 334 ("The Supreme Court continued to use the ‘trespass doctrine’ as the main force behind Fourth Amendment protection until 1960, when the Court began to slowly move away from basing its decisions on whether or not there had been a physical trespass and instead suggesting that privacy was the real issue." (citations omitted)).

77. Nowlin, supra note 52, at 1031-32 ("[T]he traditional [protected interest] approach emphasized the interests specifically enumerated as protected in the text of the Fourth Amendment, ‘persons, houses, papers, and effects,’ and the common-law principles rooted in property law that formed the important broader legal context of the text." (citations omitted)).

78. Boyd, 116 U.S. 627 (quoting Entick v. Carrington, 19 Howell’s State Trials 1029 (1765)); see also Clancy, supra note 10, at 309-27 (tracing the rise and demise of the property-based, constitutionally protected area theory of the Fourth Amendment).


80. See id. at 465 ("The language of the Amendment can not be extended and expanded to include telephone wires reaching to the whole world from the defendant’s house or office. The intervening wires are not part of his house or office."). As this Article will discuss infra, scholars such as Orin Kerr have argued that Olmstead was not, in fact, based on a trespass theory. See Kerr, supra note 18, at 68.

any property right and did not impact a person, home, paper, or effect, and thus was not a search for Fourth Amendment purposes. Under \textit{Olmstead}, a court had to determine merely if the area fell within the “protected interests” of the Constitution and whether there had been a physical invasion of that interest. If not, the Fourth Amendment provided no shelter. This holding, which lasted for forty years until \textit{Katz v. United States} replaced it, provided no defense to nontrespassory actions.

Although \textit{Olmstead} has been relegated to Fourth Amendment history, the debate between Taft and Brandeis is strikingly relevant to the issues of Fourth Amendment security in public today. The choice of analytical frames remains contested: between a narrow, constitutionally protected interests-oriented approach and a more expansive, \textit{Boyd}-influenced vision.

In \textit{Olmstead}, Taft based his analysis on the limiting words of the document: “The Amendment itself shows that the search is to be of material things—the person, the house, his papers or his effects.” In application, conversations overheard or items seen cannot be protected under the Fourth Amendment because they are not material things falling under the textual language. Then, perfectly teeing up the issue of curtilage and surveillance, Taft relied on \textit{Hester v. United States}, a curtilage case, and \textit{United

82. \textit{Id.} at 466.
83. \textit{See id.}
84. \textit{See id.}
86. This statement is perhaps overbroad as the Supreme Court did apply the Fourth Amendment to subpoenas even though they did not involve a trespass. \textit{See supra} note 72 and accompanying text.
88. The most recent example being the contrasting opinions in \textit{United States v. Jones}. \textit{See Part I.B.}
90. \textit{See Sloboigin, supra} note 41, at 1397-98 (“Until the 1960s, the Fourth Amendment protected against government trespass in any of the four areas named in the Fourth Amendment—houses, persons, papers, and effects. Under that approach, the prevalence of technology the police used was irrelevant. The sole inquiry was whether operation of the technology required intrusion into a protected area. If so, a search occurred; if not, then the Fourth Amendment was not implicated.”) (citations omitted).
91. 265 U.S. 57, 58 (1924) (“It is obvious that even if there had been a trespass, the above testimony was not obtained by an illegal search or seizure. The defendant's own acts, and those of his associates, disclosed the jug, the jar and the bottle—and there was no seizure in the sense of the law when the officers examined the contents of each after it had been
States v. Lee,92 a case involving a nighttime plain view search with a spotlight, to hold that if officers observe an illegality, even if by means of a trespass or the use of heightened technology, it is not a search for Fourth Amendment purposes so long as it does not impact a constitutionally protected interest.93

Justice Brandeis, in contrast, began his dissent with the idea that the Fourth Amendment must evolve from the language of the text:

Protection against such invasion of “the sanctities of a man’s home and the privacies of life” was provided in the Fourth and Fifth Amendments by specific language. But “time works changes, brings into existence new conditions and purposes.” Subtler and more far-reaching means of invading privacy have become available to the Government.94

Then, in what must be understood as one of the most prescient dissents in constitutional history, he wrote:

Moreover, “in the application of a constitution, our contemplation cannot be only of what has been but of what may be.” The progress of science in furnishing the Government with means of espionage is not likely to stop with wire-tapping. Ways may someday be developed by which the Government, without removing papers from secret drawers, can reproduce them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home.95

To combat these new invasions, Brandeis envisioned a Fourth Amendment that protected a wider category of interests, not limited to homes, papers, or effects in homes. As he stated:

abandoned.”).

92. 274 U.S. 559, 563 (1927) (“The testimony of the boatswain shows that he used a searchlight.... Such use of a searchlight is comparable to the use of a marine glass or a field glass. It is not prohibited by the Constitution.”).


94. Id. at 473 (Brandeis, J., dissenting) (citation omitted) (citing Boyd v. United States, 116 U.S. 616, 630 (1886); see also id. at 472 (Brandeis, J., dissenting) (“Clauses guaranteeing to the individual protection against specific abuses of power, must have a similar capacity of adaptation to a changing world.”)).

95. Id. at 474 (Brandeis, J., dissenting).
The makers of our Constitution undertook to secure conditions favorable to the pursuit of happiness…. They sought to protect Americans in their beliefs, their thoughts, their emotions and their sensations. They conferred, as against the Government, the right to be let alone—the most comprehensive of rights and the right most valued by civilized men. To protect that right, every unjustifiable intrusion by the Government upon the privacy of the individual, whatever the means employed, must be deemed a violation of the Fourth Amendment.\textsuperscript{96}

This vision of the Fourth Amendment acknowledged the right to be left alone. It articulated a space of privacy free from government surveillance. It was based in part on Brandeis’s famous work on the civil custom of privacy.\textsuperscript{97} It was also based on an idea of personal autonomy unconfined to life at home, or hidden from view.\textsuperscript{98} The Court eventually adopted a version of this idea in \textit{Katz}, the subject of the next Section.\textsuperscript{99}

\section*{2. Reasonable Expectation of Privacy Theory}

The modern Fourth Amendment doctrine begins with \textit{Katz v. United States}.\textsuperscript{100} Much has been written about \textit{Katz}, dissecting its meaning and critiquing and reframing its emphasis.\textsuperscript{101} Like \textit{Olmstead}, \textit{Katz} involved a wiretap of a suspected criminal, this time involved in illegal gambling from a public payphone.\textsuperscript{102} As argued to the Supreme Court, \textit{Katz} presented the question of whether the

\begin{footnotesize}
96. \textit{Id.} at 478 (Brandeis, J., dissenting).
99. \textit{Id.} at 1756 ("Justice Brandeis's view of the Fourth Amendment became accepted by the Court in a later eavesdropping case, \textit{Katz v. United States}.").
100. 389 U.S. 347 (1967).
\end{footnotesize}
payphone constituted a “constitutionally protected area” and whether “physical penetration of [the] constitutionally protected area” was required for the Fourth Amendment to be violated.

Justice Stewart, however, writing for the majority, rejected the questions presented. Stewart argued that there was no general right to privacy, as envisioned by the followers of Brandeis, and further that the definitional battles over what was a constitutionally protected area disserved the value of the Fourth Amendment. Stewart countered with the idea that:

[T]he Fourth Amendment protects people, not places. What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.

Thus, Katz’s actions of entering a public telephone booth, closing the door, and paying the money to use the services of the phone company entitled him to preserve his conversations as private. This was so even though the conversation was held in a publicly observable space and concerned illegal activities. Stewart then formally rejected the narrow trespass theory derived from Olmstead.

103. Id. at 349 (“Whether a public telephone booth is a constitutionally protected area so that evidence obtained by attaching an electronic listening recording device to the top of such a booth is obtained in violation of the right to privacy of the user of the booth.”).
104. Id. at 350 (“Whether physical penetration of a constitutionally protected area is necessary before a search and seizure can be said to be violative of the Fourth Amendment to the United States Constitution.”).
105. Id.; see Timothy Casey, Electronic Surveillance and the Right to Be Secure, 41 U.C. Davis L. Rev. 977, 996 (2008) (“Katz signified a shift away from the property-trespass theory of Fourth Amendment analysis by finding a constitutionally protected interest separate from any place and distinct from tangible property.”).
107. Id. at 351-52 (citations omitted).
108. Id. at 352 (“But what he sought to exclude when he entered the booth was not the intruding eye—it was the uninvited ear. He did not shed his right to do so simply because he made his calls from a place where he might be seen. No less than an individual in a business office, in a friend’s apartment, or in a taxicab, a person in a telephone booth may rely upon the protection of the Fourth Amendment.” (citations omitted)).
109. Id. at 353 (“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. The Government’s activities in electronically listening to
Although Stewart wrote the majority decision, Justice Harlan wrote the concurring opinion that has served as the test for Fourth Amendment searches post-*Katz*. Harlan wrote:

“[T]he Fourth Amendment protects people, not places.” The question, however, is what protection it affords to those people. Generally, as here, the answer to that question requires reference to a “place.” My understanding of the rule that has emerged from prior decisions is that there is a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as “reasonable.”

Harlan applied this two-prong test, with subjective and objective components, to find that the phone booth was a “temporarily private place whose momentary occupants’ expectations of freedom from intrusion are recognized as reasonable.” Explaining the contours of the protection, Harlan opined: “Thus a man’s home is, for most purposes, a place where he expects privacy, but objects, activities, or statements that he exposes to the ‘plain view’ of outsiders are not ‘protected,’ because no intention to keep them to himself has been exhibited.” As is well understood, this expectation of privacy test remains the dominant working theory of Fourth Amendment protection.

3. Post-Reasonable Expectation of Privacy: Doctrinal Gaps

Although the conflicting pieces of Fourth Amendment doctrine are not clear, they are revealing. Certain principles reappear—a concern about arbitrary government action, a reverence for

and recording the petitioner’s words violated the privacy upon which he justifiably relied while using the telephone booth and thus constituted a 'search and seizure' within the meaning of the Fourth Amendment. The fact that the electronic device employed to achieve that end did not happen to penetrate the wall of the booth can have no constitutional significance.”); Slobogin, *supra* note 41, at 1397-98.

110. See *Smith v. Maryland*, 442 U.S. 735, 740 (1979) (recognizing that Justice Harlan’s concurrence is the controlling analysis).
112. *Id.*
113. *Id.*
intimacy and autonomy,115 a primacy of certain traditional spaces,116 an acknowledgment of technological invasiveness,117 an emphasis on constitutional text,118 and an evolving consideration of a sense of private space—that reflect legal, social, and customary limits.119 Yet, although these pieces exist together, the puzzle for the whole remains.

Perhaps it is not surprising that, with such a fragmented history, the Fourth Amendment has been the source of significant academic commentary. Scholars have debated the textual meaning of its clauses120 as well as the core purpose of the Amendment.121 The doctrinal gaps have been exposed, especially in a post-reasonable expectation of privacy world.

GPS monitoring context, I question the appropriateness of entrusting to the Executive, in the absence of any oversight from a coordinate branch, a tool so amenable to misuse, especially in light of the Fourth Amendment’s goal to curb arbitrary exercises of police power to and prevent ‘a too permeating police surveillance.’” (citation omitted)); United States v. Martinez-Fuerte, 428 U.S. 543, 554 (1976) (explaining that the purpose of the Fourth Amendment is to protect against “arbitrary and oppressive interference by enforcement officials with the privacy and personal security of individuals” (citations omitted)); Camara v. Mun. Court of S.F., 387 U.S. 523, 528 (1967); Wolf v. Colorado, 338 U.S. 25, 27 (1949) (“The security of one’s privacy against arbitrary intrusion by the police—which is at the core of the Fourth Amendment—is basic to a free society.”), overruled by Mapp v. Ohio, 367 U.S. 643 (1961).

115. Kyllo v. United States, 533 U.S. 27, 37 (2001) (discussing the Fourth Amendment’s protections of the intimate details of the home); Mary I. Coombs, Shared Privacy and the Fourth Amendment, or the Rights of Relationships, 75 CALIF. L. REV. 1593, 1635 (1987) (“A view of the world that recognizes the essential interconnectedness of people and the importance of intimacy and sharing is foreign to the atomistic social theory underlying the Court’s present doctrine.”); see also Laurent Sacharoff, The Relational Nature of Privacy, 16 LEWIS & CLARK L. REV. 1249, 1277 (2012) (“The history of the Fourth Amendment amply supports the notion that it protects against the humiliation and loss of dignity wrought by unreasonable government searches and seizures.”).

116. See notes infra 201-04 and accompanying text; see, e.g., Katz, 389 U.S. at 352 (1967).

117. See, e.g., Nita A. Farahany, Searching Secrets, 160 U. PA. L. REV. 1239, 1241 (2012);

118. See supra notes 66-74 and accompanying text.

119. See infra Part II.


The general “theory of Fourth Amendment theory”\(^\text{122}\) is that something is missing in the *Katz* reasonable expectation of privacy test. Scholars have examined the types of interests protected to determine the threshold question of when a government action becomes a search. Does it matter the type of information being observed?\(^\text{123}\) Do we judge it from an empirical framework of reasonable expectations?\(^\text{124}\) Should there be a sliding scale?\(^\text{125}\) Does the type of surveillance matter?\(^\text{126}\) Or the type of technology?\(^\text{127}\) Or, is it the exploitation of the technology that makes it a search?\(^\text{128}\)

Other scholars have looked at the unaddressed values underlying the Fourth Amendment. Is the right to anonymity undervalued?\(^\text{129}\)

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\(^{122}\) The theory of Fourth Amendment theory might make an excellent law review topic, as there exist hundreds of scholarly attempts to rework the doctrine.

\(^{123}\) See, e.g., Ric Simmons, *From Katz to Kyllo, A Blueprint for Adapting the Fourth Amendment to Twenty-First Century Technologies*, 53 HASTINGS L.J. 1303, 1321-22 (2002) (“[T]he method of surveillance should be irrelevant, and the results of the surveillance are all that should matter in determining whether an individual's reasonable expectation of privacy has been infringed. Thus, in applying the *Katz* test, courts should look only to the characteristics of the item or information being observed—its location, its nature, and/or the actions taken by the defendant to conceal it.”).


\(^{126}\) See, e.g., Solove, *supra* note 59, at 1514 (“[T]he Fourth Amendment should provide protection whenever a problem of reasonable significance can be identified with a particular form of government information gathering.”).

\(^{127}\) See, e.g., Kerr, *supra* note 52, at 480 (defining the equilibrium-adjustment theory of the Fourth Amendment: “When changing technology or social practice makes evidence substantially harder for the government to obtain, the Supreme Court generally adopts lower Fourth Amendment protections for these new circumstances to help restore the status quo ante level of government power. On the other hand, when changing technology or social practice makes evidence substantially easier for the government to obtain, the Supreme Court often embraces higher protections to help restore the prior level of privacy protection”).

\(^{128}\) See, e.g., Tomkovicz, *supra* note 10, at 438 (“Official exploitation of a scientific or technological device should be considered a Fourth Amendment search at least when the effect is to enhance, augment or supplement human sensory abilities or other capacities in ways that have made it possible for the authorities to gain access to any information that otherwise would have been, or is highly likely to have been, imperceptible or inaccessible or would only have been, or is highly likely only to have been, perceived or acquired by means that are governed by the Fourth Amendment.”).

\(^{129}\) See, e.g., Christopher Slobogin, *Public Privacy: Camera Surveillance of Public Places and the Right to Anonymity*, 72 MISS. L.J. 213, 217 (2002) (“Continuous, repeated or recorded government surveillance of our innocent public activities that are not meant for public
Or is the real issue one of power,\textsuperscript{130} dignity,\textsuperscript{131} autonomy,\textsuperscript{132} a lack of respect,\textsuperscript{133} trust,\textsuperscript{134} or personal identity?\textsuperscript{135}

This snapshot of Fourth Amendment academic commentary reveals a common insight about the current doctrine: it is lacking a core organizing principle that incorporates protections of property, privacy, and security.\textsuperscript{136} This confusion is only exacerbated by the fractured analysis of the Supreme Court in \textit{United States v. Jones}. As this Article will discuss in the next section, \textit{Jones} significantly increases the uncertainty about how to analyze surveillance in public.

consumption is neither expected nor to be condoned, for it ignores the fundamental fact that we express private thoughts through conduct as well as through words. The Fourth Amendment should be construed to recognize the right to public anonymity as a part of the privacy expectations that, to use the Supreme Court’s well-known phrase, ‘society is prepared to recognize as reasonable.’\textsuperscript{130}


\textsuperscript{131.} See, e.g., Jeremy M. Miller, \textit{Dignity as a New Framework, Replacing the Right to Privacy}, 30 T. JEFFERSON L. REV. 1, 2 (2007) (proposing that dignity replace privacy as the core Fourth Amendment point of analysis); \textit{id.} at 20 (“For example, were ‘search’ defined as a violation of intrinsic human dignity, it is likely the Court would recognize aerial surveillance into one’s backyard, without warrant, as a violation of the home dweller’s dignity. Stop and frisk, based on less than probable cause, would similarly violate reasonable standards of dignity. And, for the motorist, whose car might in fact be his or her most cherished place, arbitrary police intrusion might preclude much that happens today, since under present law, if one steps into his or her car, he or she surrenders the ‘right to be let alone.’”).


\textsuperscript{133.} See, e.g., Sundby, \textit{supra} note 98, at 1777.

\textsuperscript{134.} See, e.g., Taslitz, \textit{supra} note 11, at 131 (“Privacy in the information age is best conceived as the maintenance of metaphorical boundaries that define the contours of personal identity. Identity is complex; different circumstances reveal different aspects of our nature. Each of us wears many masks wherein each mask reflects a different aspect of who we really are. We do not want our entire natures to be judged by any one mask, nor do we want partial revelations of our activities to define us in a particular situation as other than who we want to be. In short, we want to choose the masks that we show to others; any such loss of choice is painful, amounting almost to a physical violation of the self.”) (citations omitted).

\textsuperscript{135.} As this Article will discuss in Part III, the theory of personal curtilage adds to these other well-considered visions of the Fourth Amendment.
B. Present Tensions: The Fourth Amendment After United States v. Jones

*United States v. Jones* perfectly encapsulates the confusion of how surveillance technology has upended the Fourth Amendment doctrine.\(^{137}\) In a case about wireless GPS monitoring—a technology so precise that it reported Antoine Jones’s movements twenty-four hours a day for twenty-eight days\(^{138}\)—the Supreme Court majority relied on an analogy to horse and buggies from the common law era.\(^{139}\) Worse, the Court resolved the issue on the narrowest of grounds, leading the concurring Justices to speculate on the impact of Fourth Amendment technology in a way that has led some scholars to question if the Justices understood what they were saying.\(^{140}\)

Much has already been written about *Jones*.\(^{141}\) It presented a relatively straightforward question: Is the warrantless GPS tracking of a suspect in public a search or seizure for Fourth Amendment purposes?\(^{142}\) The majority held that if a physical trespass occurs there is a Fourth Amendment “search.” This is so even if third parties can observe “the effect”—the car—in public.\(^{143}\) The majority further held that a government action can still be a search, even if it produces only public information.\(^{144}\)

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137. *See, e.g.*, Kerr, supra note 9, at 343-44 (critiquing the concurring Justices’ support for what the author terms the “mosaic theory”).
139. *Id.* at 950 n.5 (“Justice Alito’s concurrence doubts the wisdom of our approach because ‘it is almost impossible to think of late-18th-century situations that are analogous to what took place in this case.’ But in fact it posits a situation that is not far afield—a constable’s concealing himself in the target’s coach in order to track its movements. There is no doubt that the information gained by that trespassory activity would be the product of an unlawful search—whether that information consisted of the conversations occurring in the coach, or of the destinations to which the coach traveled.” (citations omitted)).
140. *See, e.g.*, Kerr, supra note 9, at 313-14.
142. *Jones*, 132 S. Ct. at 948.
143. *See id.* at 953 n.8 (“The Fourth Amendment protects against trespassory searches only with regard to those items (‘persons, houses, papers, and effects’) that it enumerates.”).
144. *Id.* at 952; Slobogin, supra note 20, at 7.
The analytical strands of both *Olmstead* and *Katz* converge in Justice Scalia’s majority opinion. Bucking decades of precedent, Scalia chose a traditional property-based rationale to resolve the issue: “The Government physically occupied private property for the purpose of obtaining information. We have no doubt that such a physical intrusion would have been considered a ‘search’ within the meaning of the Fourth Amendment when it was adopted.”\(^{145}\) Because the car was an “effect” and because the government intruded upon the “effect” to obtain information, the majority found a Fourth Amendment search.\(^{146}\) Reclaiming the trespass theory for a more modern era,\(^ {147}\) Justice Scalia explained:

> The text of the Fourth Amendment reflects its close connection to property, since otherwise it would have referred simply to “the right of the people to be secure against unreasonable searches and seizures”; the phrase “in their persons, houses, papers, and effects” would have been superfluous. Consistent with this understanding, our Fourth Amendment jurisprudence was tied to common-law trespass, at least until the latter half of the 20th century.\(^ {148}\)

Justice Scalia acknowledged that the conventional wisdom, and the government’s argument before the Court, assumed that the trespass theory had been superseded by the *Katz* standard, but argued that “[t]he *Katz* reasonable-expectation-of-privacy test has been added to, but not substituted for, the common-law trespassory test.”\(^ {149}\) Thus, under the majority view, both avenues of analysis

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146. *Id.* at 949-50.
147. As Justice Alito stated in his concurrence, “The Court’s reasoning in this case is very similar to that in the Court’s early decisions involving wiretapping and electronic eavesdropping, namely, that a technical trespass followed by the gathering of evidence constitutes a search.” *Id.* at 959.
148. *Id.* at 949-50 (citations omitted). “As explained, for most of our history the Fourth Amendment was understood to embody a particular concern for government trespass upon the areas (‘persons, houses, papers, and effects’) it enumerates.” *Id.*
149. *Id.* at 947 (emphasis added); see also *id.* at 955 (Sotomayor, J., concurring) (“As the majority’s opinion makes clear, however, *Katz’s* reasonable-expectation-of-privacy test augmented, but did not displace or diminish, the common-law trespassory test that preceded it. Thus, ‘when the Government does engage in physical intrusion of a constitutionally protected area in order to obtain information, that intrusion may constitute a violation of the Fourth Amendment.’” (citations omitted)).
remain available to determine a Fourth Amendment search. Left unaddressed was whether a non-trespassory GPS tracking or equivalent is a search for Fourth Amendment purposes.  

Jones generated two concurrences that attempted to think through that unresolved question and challenged Justice Scalia’s trespassory approach. First, Justice Sotomayor agreed with Scalia that a trespassory intrusion into a constitutionally protected area constituted a search. But, she also reaffirmed the Katz standard recognizing that not all government intrusions would require a trespass. Turning to the precise question before the Court, Justice Sotomayor then offered two new insights about the relationship between surveillance technology and the Fourth Amendment in public.

First, Justice Sotomayor emphasized that the scale, aggregation, and precision of intimate details revealed by surveillance technology in public presented new challenges for the Fourth Amendment. She wrote:

GPS monitoring generates a precise, comprehensive record of a person’s public movements that reflects a wealth of detail about her familial, political, professional, religious, and sexual associations. The Government can store such records and efficiently mine them for information years into the future. And because GPS monitoring is cheap in comparison to conventional surveillance techniques and, by design, proceeds surreptitiously, it evades the ordinary checks that constrain abusive law enforcement practices: “limited police resources and community hostility.”

150. Id. at 954 (acknowledging that non-trespassory searches are not resolved by the majority decision, but arguing that such “vexing problems” can be left to another day).
151. Id. (Sotomayor, J., concurring) (“I join the Court’s opinion because I agree that a search within the meaning of the Fourth Amendment occurs, at a minimum, ‘[w]here, as here, the Government obtains information by physically intruding on a constitutionally protected area.’” (alteration in original)).
152. Id. at 954-55 (Sotomayor, J., concurring) (“Of course, the Fourth Amendment is not concerned only with trespassory intrusions on property. Rather, even in the absence of a trespass, ‘a Fourth Amendment search occurs when the government violates a subjective expectation of privacy that society recognizes as reasonable.’” (citations omitted)).
153. Id. at 955-56.
Awareness that the Government may be watching chills associational and expressive freedoms. And the Government’s unrestrained power to assemble data that reveal private aspects of identity is susceptible to abuse. The net result is that GPS monitoring—by making available at a relatively low cost such a substantial quantum of intimate information about any person whom the Government, in its unfettered discretion, chooses to track—may “alter the relationship between citizen and government in a way that is inimical to democratic society.”

Evoking the Olmstead dissent and Brandeis’s warning of an unchecked surveillance state, in which all sorts of information is subject to monitoring, the concurrence emphasized the heightened concern with government scrutiny of intimate private aspects of our identity—made evident by our public associations and actions.

Second, in an effort to redraw the Katz line for this type of public surveillance, Justice Sotomayor offered a new test: “I would ask whether people reasonably expect that their movements will be recorded and aggregated in a manner that enables the Government to ascertain, more or less at will, their political and religious beliefs, sexual habits, and so on.” Presumably, if people do not expect this aggregation to occur then the use of such a technique will be a search under the Fourth Amendment. Justice Sotomayor did not offer any sustained analysis of how this approach based on custom and reasonable expectations would work, preferring to decide the case on the narrower ground available.

Justice Alito, writing for four Justices, analyzed the case under the Katz standard, arguing that Katz allows the courts to address the balancing of interests that arises when new technologies invade private spaces. After a thorough critique of the trespassory theory

154. Id. (Sotomayor, J., concurring) (citations omitted).
155. Justice Sotomayor even called into question some controlling Fourth Amendment principles. Id. at 957 (“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.”).
156. Id. at 956 (cautioning against government collection of “private aspects of identity”).
157. Id.
158. Id. at 957.
159. Id. at 964 (Alito, J., concurring) (“The best that we can do in this case is to apply existing Fourth Amendment doctrine and to ask whether the use of GPS tracking in a particular case involved a degree of intrusion that a reasonable person would not have
adopted by the majority, Alito concluded that the tracking at issue in *Jones* should be considered a Fourth Amendment search, but short-term tracking or tracking for a more serious crime might require a different analysis:

Under this approach, relatively short-term monitoring of a person’s movements on public streets accords with expectations of privacy that our society has recognized as reasonable. But the use of longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy. For such offenses, society’s expectation has been that law enforcement agents and others would not—and indeed, in the main, simply could not—secretly monitor and catalogue every single movement of an individual’s car for a very long period.\(^{160}\)

As Orin Kerr has pointed out, this test creates some ambiguity as it only applies to long-term surveillance, and only certain types of crimes.\(^{161}\) Justice Alito does not define those terms and instead appears to invite legislatures to fill in the gaps of overseeing new technologies.\(^{162}\) Alito concluded that the GPS monitoring in *Jones* did constitute a search for Fourth Amendment purposes, thus providing five votes for a finding that long-term surveillance could be considered a Fourth Amendment search under *Katz*.\(^{163}\)

For purposes of this Article, *United States v. Jones* is important for four major reasons. First, it confirms that current Fourth Amendment doctrine has no easy answer to the problem of technological surveillance that does not involve a physical trespass. Second, *Jones* reveals that five Justices believe that there exists some Fourth Amendment protection of persons in public. Third, several Justices appear dissatisfied with the existing Fourth Amendment theories, necessitating new approaches to the problem. Finally, *Jones* offers a preview of other problems that will soon reach the Court involving even more sophisticated and more invasive surveillance technologies.

\(^{160}\) Id. (citation omitted).

\(^{161}\) Kerr, *supra* note 9, at 327.

\(^{162}\) Slobogin, *supra* note 20, at 36-37 (citing *Jones*, 132 S. Ct. at 964).

\(^{163}\) *Jones*, 132 S. Ct. at 964.
Simply stated, the doctrinal gap revealed by Jones will only widen as a result of new technological surveillance advances.\(^\text{164}\) Jones represents the tip of the proverbial iceberg as new technologies will eviscerate traditional boundaries of sensory perception. Constantly recording Google glasses,\(^\text{165}\) automated computer response systems,\(^\text{166}\) biometric scans,\(^\text{167}\) omnipresent drones,\(^\text{168}\) and a host of yet-to-be-created new technologies will be utilized by law enforcement in the future. Reasonable expectations of privacy will be hard to claim in a society of ubiquitous surveillance.\(^\text{169}\) Physical trespass will be unnecessary with non-trespassory technologies. New technological devices have and will continue to be able to see, hear, smell, and touch citizens in ways that were simply impossible in prior eras. Equally troubling, the data from these surveillance techniques will be saved, aggregated, and data-mined in a manner that presents real concerns for individual freedom.\(^\text{170}\) These tech

\(^{164}\) See Taslitz, supra note 11, at 133 (“The Supreme Court has generally failed to see any enhanced dangers to privacy caused by rapidly changing police surveillance technologies.... ‘Privacy in public,’ especially on the street, is an oxymoron to this Court.”) (citations omitted).


\(^{166}\) David Hambling, The Future of Surveillance? When Automated Brains Keep Watch 24/7, POPULAR MECHANICS (May 26, 2010, 10:30 AM), http://www.popularmechanics.com/technology/how-to/computer-security/future-of-surveillance-cameras (discussing the Automated Warning and Response Engine (AWARE) computer system that not only records information but acts on information recorded, such as checking DMV records, from observed license plates).


\(^{168}\) See supra note 2; see also Andy Pasztor, U.S. Skies Could See More Drones, WALL ST. J., Feb. 4-5, 2012, at A7 (commenting on new Federal Aviation Administration regulations that will increase domestic use of surveillance drones). But see Christine Clarridge, Seattle Grounds Police Drone Program, SEATTLE TIMES (Feb. 8, 2013, 8:52 AM), http://seattletimes.com/htmllocalnews2020312864_spddronesxml.html (commenting on the cessation of a planned use of surveillance drones for domestic law enforcement after community complaints about privacy).


\(^{170}\) E.g., Solove, supra note 59, at 1526 (“Massive and extensive government surveillance in public raises many concerns for freedom and democracy. Surveillance gives extensive power to the watchers. The government could develop a repository of information about citizens and then use any instances of infractions as a pretext to attack people for things they say or for
nological developments require a new framework to build constitutional spaces of protection. The doctrinal tension begun in *Olmstead*, continued in *Katz*, and debated in *Jones* opens the door to a new Fourth Amendment analysis for the modern age. The next three Parts develop and then apply the theory of personal curtilage to this future problem.

II. THE CURTILAGE PRINCIPLE

In the face of doctrinal uncertainty and technological advances, it might seem odd to rely on the ancient concept of curtilage to build a new theory of Fourth Amendment protection. Yet, curtilage offers a historically grounded, constitutionally balanced, and flexible framework to understand the core protections of the Fourth Amendment.171

Curtilage was first and foremost an acknowledged legal fiction—designed to expand the area of personal protection beyond the inside of a home.172 In addition, curtilage offered a limited protection in areas involving human, family, and associational intimacy considered important to personal and political development.173 Finally, it was a personal and self-made barrier to governmental and societal invasion.174 Curtilage had to be built, updated, and

their political beliefs and activities. The government could also use any embarrassing information gleaned from surveillance to blackmail people. Government officials could leak such information either through carelessness or to intentionally retaliate against a person or smear them. Surveillance could chill speech, association, and other forms of dissent.”).

171. See United States v. Romano, 388 F. Supp. 101, 104 n.4 (E.D. Pa. 1975) (“The word curtilage is derived from the Latin cohors (a place enclosed around a yard) and the old French courtillage or courtillage which today has been corrupted into courtyard. Originally it referred to the land and outbuildings immediately adjacent to a castle that were in turn surrounded by a high stone wall. Today its meaning has been extended to include any land or building immediately adjacent to a dwelling. Usually it is enclosed some way by a fence or shrubs.” (citations omitted)).

172. See supra note 15 and accompanying text; see also United States v. French, 291 F.3d 945, 951 (7th Cir. 2002) (“This protection is not limited to the four walls of one’s home, but extends to the curtilage of the home as well.”).

173. California v. Ciraolo, 476 U.S. 207, 212-13 (1986) (“The protection afforded the curtilage is essentially a protection of families and personal privacy in an area intimately linked to the home, both physically and psychologically, where privacy expectations are most heightened.”).

174. The wall had to be built, thus conveying symbolically and functionally a barrier between the private and the public.
protected. It invested ownership in the right of personal protection with the individual seeking private sanctuary. As this Part will discuss, although traditional curtilage has its limitations, it offers an analytical framework to develop an enhanced protection for people in public.

The history of curtilage in America can be divided into two eras: (1) the common law approach that was imported to America, and (2) the “constitutionalizing” of the term in Supreme Court cases involving the Fourth Amendment. This Part will discuss both stages, followed by a brief section on how courts currently apply the doctrine.

A. Common Law Understanding

The concept of curtilage arose out of the common law. British law established certain defined property rights, the most important of which was the preservation of real property interests. Property law established physical boundaries, so that one property could be distinguished from another. These boundaries traditionally included an enclosure with a main house and grounds. The curtilage area was understood as a subset of this property line, further marked by a wall or a fence. Thus, man-made fence lines visually and symbolically established the curtilage line of many English properties.

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175. See infra notes 215-18 and accompanying text.
177. E.P. THOMPSON, WHIGS AND HUNTERS 21 (1975) (“The British state, all eighteenth-century legislators agreed, existed to preserve the property and, incidentally, the lives and liberties, of the propertied.”).
178. Peters, supra note 176, at 963 (“In England, because of several enclosure acts, landholdings were traditionally surrounded by fences, walls, or hedgerows. These elements compartmentalized the English landscape and made the boundary of the curtilage easy to find.”) (citations omitted).
179. Id. at 952-53.
180. Id.
181. Id. at 952 (“In England, it was relatively simple to locate the curtilage boundary because it was collinear with the wall that surrounded most dwellings.” (citing C.S. Parnell, Annotation, Burglary: Outbuildings or the Like as Part of “Dwelling House,” 43 A.L.R.2d 831 (1955))).
This line served several purposes. First, for criminal law purposes, the curtilage line established the defining line for a common law burglary.\(^{182}\) Entry into the curtilage area with the specific intent to commit a felony constituted the crime of burglary.\(^{183}\) Defining the line of the fence or wall became increasingly important to keep out unwanted visitors. Second, the curtilage space served to protect personal privacy.\(^{184}\) In an era without indoor plumbing—necessitating outdoor facilities—and with big families in small houses, people needed a space outside the walls of the house, but inside a zone of privacy.\(^{185}\) Third, the curtilage line became important to establish property lines to avoid property disputes over neighboring lands.\(^{186}\) A clear demarcation allowed for open and notorious ownership in an era when real property was a significant source of wealth.\(^{187}\)

This common law understanding of curtilage was duly brought to America.\(^{188}\) The concept informed early cases, but ran into some difficulty because of the different architectural landscape in the new world.\(^{189}\) Specifically, curtilage lines were less well drawn in more

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182. United States v. Gorman, 104 F.3d 272, 274 (9th Cir. 1996) (“At common law, curtilage was the area outside the walls of a home from which theft at night amounted to burglary.” (citation omitted)).
183. 4 WILLIAM BLACKSTONE, COMMENTARIES *223-25.
184. Gorman, 104 F.3d at 274 (“For the purposes of the Fourth Amendment, curtilage is important because it extends to a larger area the right to privacy a person enjoys inside the home: ‘[A]n individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home.’” (citation omitted)).
185. Craven v. State, 111 So. 767, 771 (Ala. Ct. App. 1927) (“Curtilage usually includes the yard, or garden, or field, which is near to, and used in connection with, the dwelling.... The privy, barn, stable, cow-houses, dairy-houses, if they are parcel of the messuage, though they are not under the same roof, or adjoining or contiguous to it, are included within the curtilage.” (citations and internal quotation marks omitted)).
186. Of course, curtilage is not defined by property lines, and many property lines are far more expansive than the actual curtilage area. The two terms are not coextensive.
188. Id. at 946 (“The curtilage doctrine was imported with the common law from England.”).
189. See, e.g., Armour v. State, 22 Tenn. 379, 385-86 (1842) (“The design is to protect the peace and quiet of one’s place of abode by day and by night—and no extension of a principle, enforced by such heavy penalties, ought to be made beyond what will give such protection in a fair and adequate manner. To hold that every house which may be built in a curtilage or courtyard of any extent, whether necessary to the enjoyment of the dwelling-house or not, whether used for family purposes or not, and entirely disconnected from the mansion-house, except by a common wall or fence, is part and parcel of the dwelling-house, is absurd—and not warranted as we think by a fair construction of the cases—though, as has been observed, it
urban city centers and more unsettled rural areas. These definitional problems only increased as cities grew, houses shrunk, and settlers occupied additional territories with vastly greater acreage. Despite the difficulties in application, the term curtilage has survived in usage from early common law, and makes appearances throughout the case law in burglary cases, civil land disputes, and negligence actions. These cases, however, did not address the Fourth Amendment implications of a private space outside the house. In fact, it was not until the 1920s that the Supreme Court addressed the interrelation of curtilage and the Fourth Amendment.

190. See, e.g., Wright v. State, 77 S.E. 657, 658 (Ga. Ct. App. 1913) (“It has been several times said by learned jurists that it was unfortunate that this term ‘curtilage,’ found in the English statutes defining the offense of burglary, and which applies to the dwelling and the houses surrounding the dwelling house in England, should have been perpetuated in the statutes of our different states; for the term is not strictly applicable to the common disposition of inclosures and buildings constituting the homestead of the inhabitants of this country, and particularly of farmers. In England dwellings and outhouses of all kinds are usually surrounded by a fence or stone wall, inclosing a small piece of land embracing the yards and outbuildings near the house, constituting what is called the ‘court,’ and this constitutes the curtilage of the dwelling house.”); Bare v. Commonwealth, 94 S.E. 168, 172 (Va. 1917) (“In England the curtilage seems to have included only the buildings within the inner fence or yard, because there, in early times, for defense, the custom was to inclose [sic] such place with a substantial wall. In this country, however, such walls or fences, in many cases, do not exist, so that with us the curtilage includes the cluster of buildings constituting the habitation or dwelling place, whether inclosed [sic] with an inner fence or not.”).

191. See Leonetti, supra note 14.

192. See, e.g., State v. Fierge, 673 S.W.2d 855, 856 (Mo. Ct. App. 1984) (“[C]urtilage includes all outbuildings used in connection with the residence, such as garages, sheds, barns, yards, and lots connected with or in the close vicinity of the residence.”); Luman v. State, 629 P.2d 1275, 1276 (Okla. Crim. App.) (“Curtilage includes all outbuildings used in connection with a residence, such as garages, sheds, [and] barns connected with and in close vicinity of the residence.”), opinion corrected, 638 P.2d 472 (Okla. Crim. App. 1981); Brown v. Okla. City, 721 P.2d 1346, 1349 (Okla. Civ. App.) (“[C]urtilage ... includes, among other things, garages, sheds, barns and the like.” (citation omitted)), cert. granted in part, amended opinion, 721 P.2d 1356 (Okla. 1986); State v. Lee, 253 P. 533, 534 (Or. 1927) (“Premises other than dwellings have been held within the protection of the Fourth Amendment[,] for example a barn. As construed by the courts from the earliest to the latest times, the words ‘dwelling’ or ‘dwelling house’ have been construed to include not only the main but all the cluster of buildings convenient for the occupants of the premises, generally described as within the curtilage.” (citation omitted)).

193. See, e.g., Hester v. United States, 265 U.S. 57 (1924); Amos v. United States, 255 U.S. 313 (1921).
B. Modern Fourth Amendment Understanding

The Supreme Court, in a series of cases, has addressed curtilage to determine whether individuals have a reasonable expectation of privacy in particular areas of their property.194 The modern definition of curtilage arises out of two cases: Oliver v. United States195 and United States v. Dunn.196 These two cases provide the framework for analysis, although lower courts applying the criteria have come to strikingly inconsistent conclusions.197

Oliver involved the warrantless search by law enforcement officers of Mr. Oliver’s fields. As described by the Supreme Court:

Arriving at the farm, [the officers] drove past petitioner’s house to a locked gate with a “No Trespassing” sign. A footpath led around one side of the gate. The agents walked around the gate and along the road for several hundred yards, passing a barn and a parked camper. At that point, someone standing in front of the camper shouted: “No hunting is allowed, come back up here.” The officers shouted back that they were Kentucky State Police officers, but found no one when they returned to the camper. The officers resumed their investigation of the farm and found a field of marihuana over a mile from petitioner’s home.198

The Court had to determine whether the warrantless search of the field of marijuana plants warranted Fourth Amendment protection. Relying on Hester v. United States,199 the Court held that such an area fell outside the curtilage area and within “open fields,” where Mr. Oliver lacked Fourth Amendment protection.200

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195. 466 U.S. 170.
196. 480 U.S. 294.
197. Stephanie M. Stern, The Inviolate Home: Housing Exceptionalism in the Fourth Amendment, 95 CORNELL L. REV. 905, 949 (2010) (“Uncertainty exists in the present doctrine, particularly as it is implemented by the lower courts: there is currently significant ambiguity for law enforcement as to whether areas are protected curtilage or unprotected open fields.”).
198. Oliver, 466 U.S. at 173.
199. Hester, 265 U.S. at 59.
200. Oliver, 466 U.S. at 177.
Oliver is understood to have established that “open fields” fall outside the curtilage and thus outside the protections of the Fourth Amendment.201 At the same time, implicit in this reasoning is that areas within the curtilage are afforded heightened protection. As the Court stated, “an individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home.”202 The Court reasoned that “open fields do not provide the setting for those intimate activities that the Amendment is intended to shelter from government interference or surveillance.”203 Further, the Court easily dismissed issues of line drawing about what separates open fields from curtilage: “[F]or most homes, the boundaries of the curtilage will be clearly marked; and the conception defining the curtilage—as the area around the home to which the activity of home life extends—is a familiar one easily understood from our daily experience.”204

Whereas Oliver exists as the Court’s first real engagement with the interrelation of curtilage and the Fourth Amendment, Dunn converted the Court’s discussion into a constitutional test.205 Dunn, which also involved a search of a suspect’s property for illegal narcotics, presented the question of whether a barn located fifty yards from a fence surrounding a ranch house was within its curtilage.206 If so, law enforcement’s warrantless search was a violation of the Fourth Amendment.

To answer the question of whether the barn fell within the curtilage of the property, the Court adopted a four-part test that

201. See id. (using the term “open fields”).
202. Id. at 178 (citation omitted).
203. Id. at 179-80 (“Curtilage is the area to which extends the intimate activity associated with the ‘sanctity of a man’s home and the privacies of life,’ and therefore has been considered part of the home itself for Fourth Amendment purposes.” (quoting Boyd v. United States, 116 U.S. 616, 630 (1886))).
204. Id. at 182 n.12.
205. United States v. Dunn, 480 U.S. 294, 300 (1987) (“In Oliver we recognized that the Fourth Amendment protects the curtilage of a house and that the extent of the curtilage is determined by factors that bear upon whether an individual reasonably may expect that the area in question should be treated as the home itself.” (citing Oliver, 466 U.S. at 180)); Tracey Maclin, Katz, Kyllo, and Technology: Virtual Fourth Amendment Protection in the Twenty-First Century, 72 Miss. L.J. 51, 63 (2002) (“United States v. Dunn elevated Oliver’s dicta on the meaning of curtilage to law.” (citation omitted)).
remains the test today. The Dunn test asks: (1) how close the claimed curtilage is to the home; (2) whether the area and the home share a common fence or barrier; (3) how the residents use the area; and (4) what steps the resident took to protect the area from observation by passersby. These four factors led the Court to determine that the barn—which was at some distance to the house, was outside the common enclosure, was used for drug manufacturing, and was not visibly marked off—did not fall within the curtilage. Further, the Court emphasized that it was “especially significant that the law enforcement officials possessed objective data indicating that the [area] was not being used for intimate activities of the home.”

Proximity to a protected space thus guides modern curtilage decisions because such spaces are naturally connected to intimacy and personal activities. In those spaces, people and families can naturally grow and develop, free from government oversight.

207. Id. at 301 (“Drawing upon the Court’s own cases and the cumulative experience of the lower courts that have grappled with the task of defining the extent of a home’s curtilage, we believe that curtilage questions should be resolved with particular reference to four factors: the proximity of the area claimed to be curtilage to the home, whether the area is included within an enclosure surrounding the home, the nature of the uses to which the area is put, and the steps taken by the resident to protect the area from observation by people passing by.”).

208. Id. at 301-03.

209. Id. at 302-03.

210. Id. at 302.

211. See California v. Ciraolo, 476 U.S. 207, 212-13 (1986) (“The protection afforded the curtilage is essentially a protection of families and personal privacy in an area intimately linked to the home, both physically and psychologically, where privacy expectations are most heightened.”); Quintana v. Commonwealth, 276 S.W.3d 753, 757 (Ky. 2008) (“The fact that the curtilage as well as the home itself is entitled to Fourth Amendment protection and an expectation of privacy is premised on strong concepts of intimacy, autonomy, and sanctuary that develop around home and family life, and the fact that many related activities will occur outside the house.” (citing Dow Chem. Co. v. United States, 749 F.2d 307 (6th Cir. 1984))).

212. Dunn, 480 U.S. at 301 n.4 (1987) (“Fencing configurations are important factors in defining the curtilage, but, as we emphasize above, the primary focus is whether the area in question harbors those intimate activities associated with domestic life and the privacies of the home.” (citation omitted)); Taslitz, supra note 11, at 158 (“Apart from its role of promoting citizen involvement in political movements, privacy also encourages the diversity and autonomy purportedly valued by liberal states, because privacy frees citizens from the ‘tyranny of the prevailing opinion and feeling.’ “ (quoting JOHN STUART MILL, ON LIBERTY 11 (Haldeman-Julius 1925) (1859)); see, e.g., Cruzan v. Dir., Missouri Dep’t of Health, 497 U.S. 261, 342-43 (1990) (Stevens, J., dissenting) (“[If the] ‘physical curtilage of the home [is protected] ... is surely ... a result of solicitude to protect the privacies of the life within,’ so
In evaluating curtilage, courts also examine the nature and uses to which the area is put as a means of determining whether it is a space that deserves heightened protection.\(^{213}\) Hence, courts provide homes with the utmost protection, with levels of privacy afforded decreasing as distance from the home’s internal sanctuary increases.\(^{214}\)

Finally, courts look to physical markers of an area—the enclosure—and steps taken to protect the area from observation, both of which serve to exclude others from surveillance.\(^{215}\) Courts too the constitutional protection for the human body is surely inseparable from concern for the mind and spirit that dwell therein.” (quoting Poe v. Ullman, 367 U.S. 497, 551 (1961) (Harlan, J., dissenting)).

\(^{213}\) See Oliver v. United States, 466 U.S. 170, 191 (1984) (Marshall, J., dissenting) (“The uses to which a place is put are highly relevant to the assessment of a privacy interest asserted therein. If, in light of our shared sensibilities, those activities are of a kind in which people should be able to engage without fear of intrusion by private persons or government officials, we extend the protection of the Fourth Amendment to the space in question, even in the absence of any entitlement derived from positive law.” (citations omitted)); Comm. to Oppose the Annexation of Topside and Louisville Rd. v. City of Alcoa, 881 S.W.2d 269, 272 (Tenn. 1994) (“Although commonly discussed in Fourth Amendment terms, curtilage is defined in 25 C.J.S., as having a well defined legal meaning in the administration of both civil and criminal law. In terms of use ‘curtilage’ is defined as a space necessary and convenient and habitually used for the family purposes and the carrying on of domestic employments; the space of ground adjoining the dwelling house, used in connection therewith in the conduct of family affairs and for carrying on domestic purposes; the ground adjacent to a dwelling house and used in connection therewith; the yard, or the garden, or field which is near to, and used in connection with, the dwelling.” (citation omitted)).

\(^{214}\) See, e.g., Jacob v. Twp. of W. Bloomfield, 531 F.3d 385, 390 (6th Cir. 2008); Widgren v. Maple Grove Twp., 429 F.3d 575, 582 (6th Cir. 2005); Siebert v. Severino, 256 F.3d 648, 654, 661 (7th Cir. 2001) (holding a barn to be part of the curtilage as “[c]urious friends and neighbors, much less a government agent with a mission, would be expected to keep out” (citation omitted)); Daughenbaugh v. City of Tiffin, 150 F.3d 594, 601-03 (6th Cir. 1998); see also Stern, supra note 34, at 940 (“Privacy of intimate association disregards the physical home in favor of assessing the likelihood that search activity will disrupt domestic life, engender interpersonal conflict, reveal personal information that is private to and constitutive of relationships, and chill socialization and intimacy.”).

\(^{215}\) Florida v. Riley, 488 U.S. 445, 454 (1989) (O’Connor, J., concurring) (“Individuals who seek privacy can take precautions, tailored to the location of the road, to avoid disclosing private activities to those who pass by. They can build a tall fence, for example, and thus ensure private enjoyment of the curtilage without risking public observation from the road or sidewalk. If they do not take such precautions, they cannot reasonably expect privacy from public observation.”); Hancock, supra note 26, at 556 (discussing Justice Powell’s dissent in Ciraolo: “The connotation of security delivered a portrait of the psychological states of feeling safe from danger and fear, while the concept of freedom conjured images of behavior, such as ease of movement, frankness of speech, and the power to act without subjection to the power of the government.”) (citations omitted).
examine the symbolic, and sometimes literal, markers of exclusion in their analysis. Of course, merely marking off an area will not by itself control the analysis. In fact, in two aerial search cases, the Supreme Court has found no expectation of privacy in spaces within the curtilage area, even when marked by enclosures and protections. But, to claim any Fourth Amendment protection, the area must, at a minimum, be intentionally marked to exclude others.

*Florida v. Jardines* confirms that curtilage remains a doctrine applicable to a modern Fourth Amendment. The majority opinion authored by Justice Scalia reiterated that the central reason why a police dog’s sniff of a home constituted a “search” was because it occurred on the curtilage of the home. Justice Scalia reasoned that “the curtilage of the house ... enjoys protection as part of the home itself.” He emphasized that the reason for this protection is that “[t]his area around the home is intimately linked to the home, both physically and psychologically, and is where privacy expectations are most heightened.” This protection is not just one of physical security, but also the ability to avoid observation from a constitutionally protected space: “The right to retreat would be significantly diminished if the police could enter a man’s property

216. *See, e.g.*, James v. United States, 550 U.S. 192, 213 (2007) (“A typical reason for enclosing the curtilage adjacent to a structure is to keep out unwanted visitors—especially those with criminal motives.”).


220. *Id.* at 1413, 1415, 1417-18 (“As it is undisputed that the detectives had all four of their feet and all four of their companion’s firmly planted on the constitutionally protected extension of Jardines’ home, the only question is whether he had given his leave (even implicitly) for them to do so. He had not.”).

221. *Id.* at 1414; *see also id.* (“We therefore regard the area immediately surrounding and associated with the home—what our cases call the curtilage—as part of the home itself for Fourth Amendment purposes.” (citation and internal quotation marks omitted)).

222. *Id.* at 1415 (citation and internal quotation marks omitted).
to observe his repose from just outside the front window." This curtilage-focused rationale garnered the votes of five Justices and will likely continue to guide analysis in future cases.

1. Traditional Trespass

Curtilage, as a constitutionally protected space, has traditionally been tied to the concept of trespass. The curtilage wall acted as a natural barrier to prevent physical entry near the home. Before modern technology, police had to physically enter the curtilage in order to obtain information or observe activities within that protected space. There was simply no other way to get the information. As modern sense-enhancing devices did not exist, a requirement of physical invasion made a logical and easy line to determine a violation of this secure space. As Justice Scalia said in *Jones*:

> It is important to be clear about what occurred in this case: The Government physically occupied private property for the purpose of obtaining information. We have no doubt that such a physical intrusion would have been considered "a search" within the meaning of the Fourth Amendment when it was adopted.

Under a traditional analysis, the relationship between curtilage and trespass made Fourth Amendment line drawing rather

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223. Id. at 1414.

224. See Ben Depoorter, *Fair Trespass*, 111 Colum. L. Rev. 1090, 1095-96 (2011) ("Principally, trespass law is a stringent form of liability applied to nonpermissive entries onto the land of another. Generally, a cause of action may lie for trespass to land even if the defendant's trespass does not cause harm and may even include incidents where the trespasser was unaware that he or she was entering the land owned by another.") (citations omitted); see also *Restatement (Second)* of Torts § 163 (1965) ("One who intentionally enters land in the possession of another is subject to liability to the possessor for a trespass, although his presence on the land causes no harm to the land, its possessor, or to any thing or person in whose security the possessor has a legally protected interest."); id. § 217 (defining trespass to chattels as "intentionally ... dispossessing another of the chattel, ... or using or intermeddling with a chattel in the possession of another").

If police obtained the information without physical invasion—through unaided senses—it was not a Fourth Amendment violation. If police obtained information through a physical invasion, it was a Fourth Amendment violation. Because curtilage was considered a protected constitutional space, and the owner of the curtilage had the right to exclude others from that space, any physical invasion of that space was a trespass and thus a Fourth Amendment violation.

2. Trespass Reconsidered

The scholarly work of Orin Kerr has recently upended this understanding, uncovering that the traditional “trespass theory” discussed in several Supreme Court cases never really existed. As Professor Kerr explains, *Warden, Maryland Penitentiary v. Hayden* and *Katz* referred to a prior adoption of a trespass theory, which the Court had never actually adopted. Instead, early court decisions relied on a mixture of “property, privacy, and policy concerns” with some cases establishing a much broader protection than physical trespass. Although property interests were influential in deciding the cases, a strict trespass theory had never been adopted. As Kerr concludes, “The history of the Fourth Amendment search doctrine brings us to a surprising conclusion: *Jones* purports to restore a trespass test that never previously existed.”

226. See Thomas, supra note 225, at 229-31.
227. Depoorter, supra note 224, at 1095 (“American property law reserves a relatively stringent doctrinal framework for trespass law, since an act of trespass is considered to be the most express violation of a landowner’s fundamental right to exclude others from his or her property.”) (citations omitted).
228. See Kerr, supra note 18, at 2 (“This essay explores the history of the Fourth Amendment and reaches the surprising conclusion that no trespass test was used in the pre-*Katz* era. Neither the original understanding nor Supreme Court doctrine equated searches with trespass. *Jones* purports to revive a test that did not actually exist.”).
230. Kerr, supra note 18, at 86-90 (discussing the creation of the “trespass myth”).
231. Id. at 69.
232. See id. at 78 (citing *Boyd v. United States*, 116 U.S. 616 (1886), to show that the Fourth Amendment protected “all invasions” of the “privacies of life”).
233. Id. at 90.
That Justice Scalia studiously avoided using the term “trespass” in his majority *Jardines* opinion, after heavily relying on it in *Jones*, supports Professor Kerr’s argument. 234 At the same time, however, the concurring and dissenting Justices in *Jardines* did use the term “trespass” to describe the search at issue. 235 Thus, like much of the Fourth Amendment, it appears the trespass connection to curtilage also remains muddled and in need of clarification.

### C. Open Questions About Trespass

Despite curtilage’s currency in the modern Fourth Amendment doctrine, a question remains to be answered in mapping out the relationship between curtilage and trespass. This uncertainty centers on the level of protection the curtilage area should receive from sense-enhancing technology.

A few points are clear. After *Jardines*, curtilage is protected from physical entry—“physically intruding.” 236 Further, after *Florida v. Riley* and *California v. Ciraolo*, curtilage is not protected from plain-view observations. 237 But, left unresolved is what level of protection curtilage should have from sense-enhancing technologies that reveal intimate details that could not be observed with the naked eye. 238 In other words, are persons in the curtilage of their home protected from sense-enhancing technologies that reveal information—es-

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234. Professor Kerr’s article was published in 2012 between the decisions in *Jones* and *Jardines*.

235. *Florida v. Jardines*, 133 S. Ct. 1409, 1418 (2013) (Kagan, J., concurring) (“Was this activity a trespass? Yes, as the Court holds today.”); *id.* at 1420 (Alito, J., dissenting) (“According to the Court, however, the police officer in this case ... committed a trespass.”).

236. *Florida v. Jardines*, 133 S. Ct. 1409, 1418 (2013) (Kagan, J., concurring) (“Was this activity a trespass? Yes, as the Court holds today.”); *id.* at 1420 (Alito, J., dissenting) (“According to the Court, however, the police officer in this case ... committed a trespass.”).


238. If, for example, law enforcement had a more sophisticated device that could “sniff” for narcotics from an area outside of the curtilage, it is not clear whether Justice Scalia’s curtilage-based rationale would protect the homeowner. Under a reasonable expectation of privacy test, *see Kyllo v. United States*, 533 U.S. 27, 34 (2001), such a device would likely be a search under the Fourth Amendment; but it is not yet resolved whether the Court would consider such a technology the equivalent to a physical invasion.
pecially activities—that could not be observed by law enforcement using their ordinary senses?

Although admittedly an open question, this Article chooses to expand curtilage protection to include invasions of intimate activities by sense-enhancing technologies. Justice Scalia’s statement in *Jardines*, that courts must protect curtilage as they do homes, provides the initial justification for this argument.²³⁹ Cases like *Oliver* and *Florida v. Riley* also specifically recognize that protected activities occur in the curtilage.²⁴⁰ This equivalence makes sense when thinking about new surveillance technologies. If sensitive audio surveillance technology can listen through walls, it should not matter if I whisper a secret to my wife on our front porch curtilage or in our bedroom. The technology can hear both. Without the technology neither conversation could be overheard. Thus, both activities should be equally protected if they cannot be heard by ordinary “plain hearing” means, but only through physical invasion of property or its equivalent, that is, sense-enhancing capture.

Precedent does not require a contrary answer. None of the prior Supreme Court cases that address observation—as opposed to physical invasion—into the curtilage area involve sense-enhancing technologies.²⁴¹ Even the over-flight cases involve police officers looking with their ordinary, unenhanced vision to observe the contraband at issue.²⁴² With the exception perhaps of *Dow Chemical* involving surveillance of an industrial commercial complex,²⁴³ there is no case that allows sense-enhancing invasion of protected constitutional spaces like the curtilage. Thus, to keep the level of protection consistent, curtilage, like the inside of a home, should be

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²³⁹. *Jardines*, 133 S. Ct. at 1414 (“The officers were gathering information in an area belonging to Jardines and immediately surrounding his house—in the curtilage of the house, which we have held enjoys protection as part of the home itself.”).

²⁴⁰. *Oliver* explicitly discussed “intimate activities” and privacy for “activities” conducted in the immediate area of the home. *Oliver v. United States*, 466 U.S. 170, 178-79 (1984). The Court in *Florida v. Riley* held that no search occurred partly because “no intimate details connected with the use of the home or curtilage were observed.” 488 U.S. at 452.

²⁴¹. See *Riley*, 488 U.S. at 447-48; *Ciraolo*, 476 U.S. at 213.

²⁴². See *Riley*, 488 U.S. at 447-48; *Ciraolo*, 476 U.S. at 213.

²⁴³. *Kyllo*, 533 U.S. at 33 (“While we upheld enhanced aerial photography of an industrial complex in *Dow Chemical*, we noted that we found ‘it important that this is not an area immediately adjacent to a private home, where privacy expectations are most heightened.’” (citing *Dow Chem. Co. v. United States*, 476 U.S. 227, 237 n.4 (1986))).
protected from sense-enhancing observations that reveal things not observable with ordinary senses.

For purposes of this Article, curtilage will be understood to protect both physical invasion and sense-enhanced invasion of a constitutionally protected space. It expands the fiction and creates a flexible rule that provides a security-based rationale that mixes property rights, privacy rights, and autonomy rights consistent with a muddled Fourth Amendment history.

D. Current Reality of Curtilage in the Courts

The roots of common law curtilage are long but shallow. The theory remains good law, and yet, in application, protection of the curtilage has been rather limited. Courts have not been protective of curtilage areas observable by aerial surveillance. Numerous federal and state cases have found no protection of curtilage due to the configuration of the property or limits to the apparent privacy expectation of the property owners. As discussed, the Supreme Court’s own line drawing provides no comfort for those expecting robust privacy in such areas. Curtilage exists as an organizing principle of Fourth Amendment law with limited practical strength.

Yet, curtilage has value as an organizing principle. For purposes of this Article, I consider curtilage less of a fixed area of protection than a recognition that the law is willing to expand protection beyond the four walls of an enclosed home. In seeing the possibility of expanding the concept of curtilage from an emphasis on property to an emphasis on personal security in public, it offers new avenues for analysis. As the next Part will discuss, freed from this property law background, the concept of personal curtilage provides

244. See, e.g., Ciraolo, 476 U.S. at 213-14.
245. See, e.g., United States v. Hatfield, 333 F.3d 1189, 1198 (10th Cir. 2003) (“If the officer had physically invaded the curtilage to make his observation, that would have constituted a search subject to the proscriptions of the Fourth Amendment.”) (emphasis added); United States v. Jenkins, 124 F.3d 768, 774 (6th Cir. 1997) (“Visual inspection from a lawful vantage point, however, is quite different from the physical assault on defendants’ backyard that occurred in this case.”).
246. The Dunn Court, in acknowledging the case-by-case nature of the analysis, also recognized that there could be no bright line rule imposed. United States v. Dunn, 480 U.S. 294, 301 n.4 (1987).
the foundation for a new theory of security from invasive surveillance in public.

III. THE THEORY OF PERSONAL CURTILAGE

The theory of personal curtilage in public involves four principles. First, persons can build a constitutionally protected space secure from governmental surveillance. Second, a person must mark that space in some symbolic manner to claim it as secure from governmental surveillance. Third, these spaces must be related to areas of personal autonomy or intimate connection, whether personal, familial, or associational. Fourth, these contested spaces—like traditional curtilage—will be evaluated by objectively balancing these factors to determine if a Fourth Amendment search has occurred. Building on the framework of traditional curtilage, a physical or sense-enhancing intrusion into this protected personal curtilage would be a search for Fourth Amendment purposes.247

This Part sets out the legal and historical justifications for this theory, focusing on how personal curtilage expands Fourth Amendment protection to persons in public who can establish: (1) a defensible space; (2) a claimed space; and (3) an intimacy-protecting space; which (4) can be balanced within existing Fourth Amendment principles. Part IV will then apply this theory to the modern problem of enhanced technological surveillance.

A. Security from Government Surveillance: A Defensible Space

A theory of personal curtilage grounds itself in the primacy of “security”248 and not “privacy” as the operative protection of the Fourth Amendment.249 Because the theory aims to define a space constitutionally defensible from privacy-destroying technologies, it

247. See Part IV infra for application.
249. As other scholars have recognized, security provides a stronger conceptual framework to carve out individual protections from government surveillance. See Casey, supra note 105, at 982 (“[R]eclaiming the language of security will provide greater clarity and guidance in our analysis of Fourth Amendment issues.”) (citation omitted); Clancy, supra note 10 (arguing that security is the proper frame to analyze Fourth Amendment protections).
must first explain why this space should be protected by the Fourth Amendment at all. The argument proceeds in four steps, looking briefly at the text, history, law, and values behind a security-focused Fourth Amendment. Each step supports the overarching theory that the Fourth Amendment includes a limited right of security to defend against government intrusion, even in public.250

As a matter of Fourth Amendment language, the text speaks to a right to be “secure” against unreasonable searches and seizures.251 Unlike a reasonable expectation of privacy, a reasonable claim to security from governmental surveillance defines itself not by what it protects, but from what it excludes. To be secure from an unreasonable search or seizure means that a barrier exists between the people and the government, a space that cannot be invaded without constitutionally adequate justification.252


251. The Fourth Amendment uses the word “secure” to define the right protected. It was borrowed from the Massachusetts Constitution of 1780, which served as the model for the Fourth Amendment. See 10 SOURCES OF OUR LIBERTIES 28 (Richard L. Perry ed., 1959); Casey, supra note 105, at 982 (“The interests that courts since Katz have described in terms of a reasonable expectation of privacy should be expressed in terms of personal security and the right to be secure”) (citation omitted); Nowlin, supra note 52, at 1052 (“The word ‘secure’ in the text is closely associated with the phrase ‘persons, houses, papers, and effects.’ The guarantee of ‘security’ is extended to four enumerated interests: the right of the people to be secure in their persons, houses, papers, and effects.”).

252. See Clancy, supra note 250, at 505 (“The ability to exclude is so essential to the exercise of the right to be secure that it is proper to say that it is equivalent to the right—the right to be secure is the right to exclude. Without the ability to exclude, a person has no security. With the ability to exclude, a person has all that the Fourth Amendment promises: no unjustified intrusions by the government. In other words, the Fourth Amendment gives the right to say, ‘No,’ to the government’s attempts to search and seize.”); Clancy, supra note 10, at 362 (“Defining security as having the right to exclude has historical roots and meaning; the Framers lived in a time that equated security with the ability to exclude. It provides an easily identified and applied rule designed to protect an individual’s right to be safe as to his or her person, house, papers, and effects.”).
As a matter of history, one can trace the emphasis on security through the speeches and documents of the founding generation. Founding leaders such as James Otis, John Adams, and James Madison emphasized the constitutional principle of security from government intrusion. The paramount concern of arbitrary governmental investigation necessitated a focus on regulating government intrusions into public and private space. Although history has established the primacy of the security of the home, this is not an exclusive protection. The Founders also valued travel, communication, associational freedoms, and personal liberty even outside the confines of the farm or homestead.

253. Clancy, supra note 250, at 487-88, 496 (quoting James Otis’s famous speech on the Writs of Assistance in which he articulated a right to be secure and that this right of security was a foundational principle of the Founding generation: “[E]very householder in this province, will necessarily become less secure than he was before this writ had any existence among us”) (alteration in original) (internal quotation marks omitted); id. at 491 (“The absolute liberties of Englishmen, as frequently declared in Parliament, are principally three: 1. The right of personal security, 2. personal liberty, and 3. private property.”) (quoting James Otis, A Vindication of the British Colonies, in PAMPHLETS OF THE AMERICAN REVOLUTION 558 (Bernard Bailyn ed., 1965)).

254. Clancy, supra note 53, at 1001-02 (demonstrating that in his correspondence with William Tudor, Adams acknowledged that Otis “examined the acts of trade and demonstrated that ... ‘they destroyed all our security of property, liberty, and life.’”) (citation omitted); id. at 1059 (“Certain qualities in those objects valued: the right to be secure. Adams and his contemporaries repeatedly used the concept of ‘security’ to describe the quality of the right protected as to each person’s life, liberty, and property.”) (citation omitted).

255. Id. at 1045 (noting that Madison spoke of the “security against general warrants”) (quoting Letter from James Madison to George Eve (Jan. 2, 1789), in 5 WRITINGS OF JAMES MADISON, 319 n.I, 320 (Gaillard Hunt ed., 1904)); id. at 1046 n.402 (“Madison, in his address to the House of Representatives, repeatedly used variations on the concept of ‘security’ as the underlying concern. Hence, he asserted, amendments were needed to ‘expressly declare the great rights of mankind secured under this Constitution.’ As another example, he stated that the Bill of Rights would ‘provide those securities for liberty which are required by a part of the community’ and that it would ‘incorporate those provisions for the security of rights.’”) (citations omitted).

256. Ku, supra note 130, at 1335-36.

257. Stern, supra note 34, at 935-36 (“Residential property was an important privacy concern in the Founding Era, but it was not the only important concern. Mail and writings were a particularly strong focus of early colonial privacy rights.... Judicial opinions of that era observed that ‘papers are often the dearest property a man can have,’ and commentators charged that the paramount harm in residential search was having a man’s ‘desks broken open, his private books, letters, and papers exposed to prying curiosity.’”) (citations omitted).

edged in Jones, the Fourth Amendment would have been violated if a constable had secreted himself in an eighteenth-century coach and learned where the coach had traveled in public.\textsuperscript{259}

As discussed earlier, the evolution of Fourth Amendment law has followed an uneven path throughout the last century.\textsuperscript{260} Yet, the Supreme Court has come back to the theme of “security” over and over. This theme has informed the Court in analyzing protections of papers,\textsuperscript{261} homes,\textsuperscript{262} persons,\textsuperscript{263} and setting out the overarching principle that the Fourth Amendment protects some spaces,\textsuperscript{264} be they constitutionally protected areas,\textsuperscript{265} property-based areas,\textsuperscript{266} or

\textsuperscript{259.} United States v. Jones, 132 S. Ct. 945, 950 n.3 (2012) (“There is no doubt that the information gained by that trespassory activity would be the product of an unlawful search—whether that information consisted of the conversations occurring in the coach, or of the destinations to which the coach traveled.”).

\textsuperscript{260.} See supra Part I; see also Nowlin, supra note 52, at 1056 (“The Fourth Amendment jurisprudence of earlier days did not always emphasize the precise terminology of ‘security’ over that of ‘reasonableness,’ but it did regularly define ‘reasonableness’ in the Fourth Amendment in light of the common-law background of property rights which form the foundation of the traditional view of ‘security’ in protected interests.”) (citations omitted).

\textsuperscript{261.} See, e.g., United States v. Boyd, 116 U.S. 616, 618 (1885) (recognizing that the Fourth Amendment issue presented “a very grave question of constitutional law, involving the personal security, and privileges and immunities of the citizen”).

\textsuperscript{262.} See, e.g., Minnesota v. Carter, 525 U.S. 83, 99 (1998) (Kennedy, J., concurring) (“Security of the home must be guarded by the law in a world where privacy is diminished by enhanced surveillance and sophisticated communication systems.”).

\textsuperscript{263.} See, e.g., United States v. Mendenhall, 446 U.S. 544, 550 (1980) (“The Fourth Amendment provides that ‘the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated....’” (footnote omitted)).

\textsuperscript{264.} See Nowlin, supra note 52, at 1061-62 (“Justice Ginsburg, the lone dissenter in [Kentucky v.] King, countered the majority’s ‘reasonableness’ analysis by building much of her analysis of the issue around the rival concept of ‘security’ as supported by text, tradition, and precedent from the ‘security’ era.... In framing her argument, Justice Ginsburg reoriented the ‘reasonableness’ frame toward ‘security’ by specially emphasizing the security language in the Fourth Amendment: The Fourth Amendment guarantees to the people [t]he right ... to be secure in their ... houses ... against unreasonable searches and seizures.”) (alteration in original).

\textsuperscript{265.} E.g., Hoffa v. United States, 385 U.S. 293, 301 (1966) (“What the Fourth Amendment protects is the security a man relies upon when he places himself or his property within a constitutionally protected area, be it his home or his office, his hotel room or his automobile. There he is protected from unwarranted governmental intrusion. And when he puts something in his filing cabinet, in his desk drawer, or in his pocket, he has the right to know it will be secure from an unreasonable search or an unreasonable seizure.”) (footnote omitted).

\textsuperscript{266.} See, e.g., Olmstead v. United States, 277 U.S. 438, 463 (1927) (“The well known
expectations of privacy. This protection explicitly has been seen in the Court’s protection of property.  

But the logic also covers persons outside of their homes or property. As part of the Fourth Amendment, individuals retain the right to take steps to exclude others from portions of their lives. This defensible space—as both metaphor and physical reality—like the traditional curtilage wall, excludes others from entry, observation, or interference and thus deserves some constitutional protection.

B. Markers of Protected Space: A Claimed Space

A theory of personal curtilage must next articulate how to mark those areas from which an individual may exclude the government. Like traditional curtilage, an examination of personal curtilage looks at what the person has done to claim the space. Like traditional curtilage, personal curtilage looks to see what physical or symbolic walls have been created to establish a protected space free from government surveillance. This is a function both of law and custom, but unlike the expectation of privacy analysis, the focus is on the individual’s affirmative actions taken to demonstrate a desire to exclude.

267. United States v. Karo, 468 U.S. 705, 729 (1984) (Stevens, J., concurring in part and dissenting in part) (“The owner of property ... has a right to exclude from it all the world, including the Government, and a concomitant right to use it exclusively for his own purposes. When the Government attaches an electronic monitoring device to that property, it infringes that exclusionary right; in a fundamental sense it has converted the property to its own use.”); David L. Callies & J. David Breemer, The Right to Exclude Others from Private Property: A Fundamental Constitutional Right, 3 WASH. U. J.L. & POL’Y 39, 58 (2000) (“The right of a landowner to exclude others is a fundamental part of the equally fundamental Constitutional Right to the enjoyment of private property.”).

268. See Tomkovicz, supra note 10, at 341 (“The core value is, in essence, an interest in secrecy—in not having the details of our lives learned or exposed against our wishes. The Framers prized this aspect of the right to be let alone as an essential foundation of a free society, and gave it a central place among the basic liberties enshrined in the Bill of Rights.”).

269. As this Article will discuss, this is more than merely the subjective expectation of privacy as understood in Katz. See Katz v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring). Instead, it involves objective actions that demonstrate that expectation of security.

270. See supra notes 217-20 and accompanying text.
Personal curtilage requires a claimed space. In everyday life, we take steps to protect our personal information from being revealed.271 We wear clothes in public, carry our papers and belongings in opaque bags and briefcases, encrypt our emails, seal letters, whisper when telling a secret, and lock our homes when we are not in them. These actions have a utility in that they minimize the amount of information provided in public; but in an era of sophisticated technological surveillance, they are relatively useless in maintaining actual privacy. X-ray scanning technology can see through our clothes and identify objects in our bags. Anyone can open our letters or intercept our e-mail. Audio enhancement can capture whispered conversations as if they were shouted across a street. Houses can be entered by skilled intruders, as well as common burglars. Thus, clear definitional markers to exclude or defend an area, and not the possibility of invasion, define security within a theory of personal curtilage.

Of course, some of this space naturally arises from existing law. One of the reasons that we have a sense of security in our belongings, mail, conversations, and homes is that laws exist to protect those areas.272 Another reason is that custom and practice have traditionally carved out an area that is respected by others.273

The theory of personal curtilage builds on this analysis by requiring that the individual take an affirmative step to signify security.274 This requirement goes beyond merely having a subjective

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273. Rakas v. Illinois, 439 U.S. 128, 143 n.12 (1978) (“Legitimation of expectations of privacy by law must have a source outside the Fourth Amendment, either by reference to concepts of real or personal property law or to understandings that are recognized and permitted by society.”); Farahany, supra note 117, at 1241 (“Government investigations to obtain information implicate the Fourth Amendment only if the investigation intrudes upon the lawful privacy interests of individuals. Those interests—individuals’ “reasonable expectations of privacy”—depend on the interests that society recognizes through law and custom.”).
274. State v. Bullock, 901 P.2d 61, 75-76 (Mont. 1995) (“We conclude that in Montana a person may have an expectation of privacy in an area of land that is beyond the curtilage
expectation of privacy, as would be the first step in the *Katz* analysis. 275 Instead, it involves objective and observable steps taken to claim that protected space. 276 Under a personal curtilage theory, the individual must affirmatively act to demonstrate the equivalent expectation of security. If, for example, a person takes precautions to secure communications in public, say by whispering or using a scrambling device, then the analysis turns not on subjective expectations, but the objective actions taken to ensure security. Even if others could still hear the conversation through an obviously placed, sophisticated listening device, such that an expectation of privacy would be unreasonable, the attempt to exclude prying ears would control the analysis.

Placing the burden on the individual to assert a constitutional right against the government creates an interesting tension with the ordinary analysis of constitutional rights. From one perspective, such an assertion should be unnecessary because the Fourth Amendment and the Bill of Rights exist as bulwarks against government overreaching. 277 In a government truly of limited powers, police would not have the surveillance powers to invade privacy or security unless there was a law specifically allowing it. 278 No
Fourth Amendment violation occurs unless a court finds that a search took place based on a violation of property or a protected expectation of privacy. Thus, individuals do need to mark out spaces of constitutional security. "We the people" are required to draw those lines. In an all-pervasive surveillance state, individuals will need to take back control of constitutionally protected security by establishing limits on government surveillance.

As this Article will discuss in Part IV, how individuals claim that space varies depending on the activity and technology at issue. Whispering may protect communications, but would not protect against visual surveillance. Clothing may protect property in a pocket against visual surveillance, but not against scent detectors searching for chemical agents. Each area may need to be marked differently depending on the circumstances. Defining those markers, like the precise boundaries of a curtilage wall, is easy in the abstract and difficult in application.

C. Relationship to Personal Detail: An Intimacy-Protecting Space

Traditional curtilage sheltered personal growth and activities from societal and governmental surveillance in order to promote autonomy and intimacy. As the Supreme Court stated in Oliver, "At common law, the curtilage is the area to which extends the intimate activity associated with the ‘sanctity of a man’s home and

commentators express concern over the growing exceptions to permissible Fourth Amendment searches. In an effort to win the war on drugs, courts have been very generous in their tolerance of increasing police intrusions into the constitutionally protected rights of individuals. But failure to limit law enforcement’s ability to conduct warrantless searches compromises the integrity of the protections guaranteed by the Bill of Rights. Contrary to their recent roles as facilitators of expanding Fourth Amendment exceptions, the traditional role of the courts was to ‘guard against overzealous law enforcement.’") (citations omitted) (quoting Stephen A. Saltzburg, Another Victim of Illegal Narcotics: The Fourth Amendment, 48 U. Pitt. L. Rev. 1, 3 (1986)).

279. See Tomkovicz, supra note 10, at 341.
280. See Ku, supra note 130, at 1326 (“The Fourth Amendment has nothing to do with privacy—the amendment clearly addresses privacy, or more precisely, the right of the people to be secure. Rather, the amendment is best understood as a means of preserving the people’s authority over government—the people’s sovereign right to determine how and when government may intrude into the lives and influence the behavior of its citizens.”) (footnote omitted).
281. See id.
282. See supra note 115.
the privacies of life,’ and therefore has been considered part of the home itself for Fourth Amendment purposes.” Although these activities typically took place in the home, the values of personal and familial intimacy extended beyond the walls of the home.

This focus on personal and intimate detail has generated a continuing debate on the scope of Fourth Amendment protections around the home. For example, in Florida v. Riley, the Supreme Court reasoned that helicopter surveillance into curtilage was not a search in part because “no intimate details connected with the use of the home or curtilage were observed.” But then in Kyllo, the Supreme Court held that for homes, which under current Fourth Amendment doctrine includes curtilage, “our cases show, all details are intimate details, because the entire area is held safe from prying government eyes.” Kyllo, in fact, seemed to challenge the entire construct of intimate details, calling into question the reasoning in Florida v. Riley.

Similarly, the Jones concurrences focused on the revelation of personal or intimate information made known through the aggregation of surveillance data collected outside the home. As Justice Sotomayor wrote, “GPS monitoring generates a precise, comprehen-

284. See Tomkovicz, supra note 10, at 425 (“The tendency to discount informational privacy interests located outside dwellings seems misguided. If a domain harbors privacy interests entitled to protection against the physical intrusions known to our ancestors, those interests should also be shielded against technological surrogates.”).
286. Florida v. Riley, 488 U.S. 445, 452 (1989). But see id. at 463 (Brennan, J., dissenting) (“What, one wonders, is meant by ‘intimate details’? If the police had observed Riley embracing his wife in the backyard greenhouse, would we then say that his reasonable expectation of privacy had been infringed? Where in the Fourth Amendment or in our cases is there any warrant for imposing a requirement that the activity observed must be ‘intimate’ in order to be protected by the Constitution?”).
288. See id. at 38 (“Limiting the prohibition of thermal imaging to ‘intimate details’ would not only be wrong in principle; it would be impractical in application, failing to provide ‘a workable accommodation between the needs of law enforcement and the interests protected by the Fourth Amendment.’ To begin with, there is no necessary connection between the sophistication of the surveillance equipment and the ‘intimacy’ of the details that it observes—which means that one cannot say (and the police cannot be assured) that use of the relatively crude equipment at issue here will always be lawful.” (citation omitted)).
289. See supra notes 153-64 and accompanying text.
sive record of a person’s public movements that reflects a wealth of detail about her familial, political, professional, religious, and sexual associations.” 290 This is so even though all of the information was in public, and observable by law enforcement. The categories mentioned—“familial,” “religious,” and “sexual”—all denote intimate or personal details.

The theory of personal curtilage borrows from these cases, examining what objective indicia exist that demonstrate that the actions relate to intimate or personal information. This rule fits within the traditional curtilage analysis, looking at the uses to which the area was put. One of the Dunn factors, “use,” 291 remains part of this analysis because, if it could be demonstrated that the area was used for family or personal activities, this would suggest it belonged within the more traditional protective categories. The test is objective and looks at things we traditionally associate with family or intimate activities. 292

As this Article will discuss in Part IV, the line drawing of what will be protected is difficult. But, so is the line drawing involving intimate details in a traditional curtilage analysis. Some areas will easily fall within the protections—actions involving religious worship, health, family, or romantic activities will be closer to the personal or intimate line. Surveillance of professional, political, or overtly public activities would fall on the other side of the line. Although the personal or intimate factor is not controlling, it could influence courts in granting greater protection against a governmental invasion revealing details that an individual sought to keep private, even in public.

290. United States v. Jones, 132 S. Ct. 945, 955 (2012) (Sotomayor, J., concurring) (citation omitted); see also id. at 956 (“And the Government’s unrestrained power to assemble data that reveal private aspects of identity is susceptible to abuse. The net result is that GPS monitoring—by making available at a relatively low cost such a substantial quantum of intimate information about any person whom the Government, in its unfettered discretion, chooses to track—may ‘alter the relationship between citizen and government in a way that is inimical to democratic society.’ ” (quoting United States v. Cuevas-Perez, 640 F.3d 272, 285 (7th Cir. 2011) (Flaum, J., concurring))).


292. See id. at 302-03.
D. Balancing Fourth Amendment Interests Within a Fourth Amendment Framework

Fourth Amendment doctrine is rife with balancing tests, and the theory of personal curtilage follows that path. Just as traditional curtilage looks to balance individual interests, societal norms, law enforcement needs, and constitutional values, so too does personal curtilage in public. The controlling logic of the theory is that this constitutionally protected space does exist, and it can be defined by courts through a case-by-case approach. As such, it will be influenced by custom, law, and existing Fourth Amendment theories.

As this Article will discuss in Part IV, this theory of personal curtilage will be more protective in some contexts and less protective in others. It will, like traditional curtilage, offer a framework for analysis without offering a definitive answer. It also will be a limited protection, but better than no protection, and clearer than the status quo of Fourth Amendment doctrine. It is not a revolution, but a reworking of a traditional test for the modern world.

E. Sense-Enhancing Trespass

Sense-enhancing technologies alter modern trespass analysis. As this Article has discussed, many new surveillance technologies require no physical intrusion, and thus use of those technologies would result in no Fourth Amendment violation under a traditional trespass approach. Yet, the danger to Fourth Amendment interests remains. The work curtilage and traditional trespass did to keep out the uninvited eye or ear must be adapted to the new modern age.


294. See supra Part II.

295. See Courtney E. Walsh, Surveillance Technology and the Loss of Something a Lot Like Privacy: An Examination of the “Mosaic Theory” and the Limits of the Fourth Amendment, 24 St. Thomas L. Rev. 169, 187 (2012) (“Though doctrinally imperfect as a matter of constitutional law, the ‘trespass’ rule as a descriptive proxy for measuring the unreasonableness of government surveillance, at one time, had the practical effect of adequately protecting privacy in a world where the only way to access one’s thoughts was to...”)
Justice Scalia recognized this reality in *Kyllo* when he stated, “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.” If curtilage is such a constitutionally protected area, activities conducted therein deserve similar protection.

The theory of personal curtilage merely applies this logic outside of the home environment. If someone can demonstrate a claim to a space of personal curtilage, any sense-enhancing surveillance technology that invades that protected space would be considered a Fourth Amendment search. At the same time, unenhanced observation—that is, plain view observation—would not be a search. Parallel to a traditional curtilage analysis, if a protected space is invaded by a sense-enhancing trespass the Fourth Amendment has been implicated.

This new concept of non-physical trespass has support in modern tort law, as new trespass-based torts arising from electronic data—unauthorized access, spam e-mail, paparazzi photos, surreptitiously skulk and sneak around one’s home and spy.”

296. *Kyllo* v. United States, 533 U.S. 27, 34 (2001) (citation omitted) (quoting Silverman v. United States, 365 U.S. 505, 512 (1961)) (adding the caveat “at least where (as here) the technology in question is not in general public use”); see also D.H. Kaye, *The Constitutionality of DNA Sampling on Arrest*, 10 CORNELL J. L. & PUB. POL’Y 455, 480 n. 104 (2001) (“*Kyllo* establishes no more than that the use of technology that is functionally equivalent to trespassing into a home to acquire information is a search.”); Kerr, *supra* note 18, at 27 (“*Kyllo* suggests a third approach, by which the trespass test is based on what information would have been known in the eighteenth century absent a trespass rather than what can be known without a trespass today.”).

297. See Erica Goldberg, *How United States v. Jones Can Restore Our Faith in the Fourth Amendment*, 110 MICH. L. REV. FIRST IMPRESSIONS 62, 68 (2012), available at http://www.michiganlawreview.org/articles/how-em-united-states-v-jones-em-can-restore-our-faith-in-the-fourth-amendment. (“Justice Scalia’s rationale, if updated to consider electronic penetration a form of trespass, would permit the labeling of more intrusions as searches, whether they look like traditional trespasses or modern-day, electronic trespasses.”); Tomkovicz, *supra* note 10, at 433 (“It is not implausible to contend that when the authorities use technology to access publicly-situated and physically-exposed details that otherwise would not or might not be perceptible to human faculties they violate privacy. If the exploitation of a device enables the government to learn details that could not or would not have been learned at all by means known to the Framers, not even by methods subject to constitutional regulation, categorical rejection of a privacy claim based on ‘public location’ does not seem sensible.”).

298. See, e.g., David M. Fritch, *Click Here for Lawsuit—Trespass to Chattels in Cyberspace*, 9 J. TECH. L. & POL’Y 31, 40-44 (2004); Laura Quilter, *The Continuing Expansion of
and environmental damages, such as smog and chemicals—a modern understanding of physics blurs the line between actions that qualified traditional trespass, such as bodily intrusion and bricks thrown through windows and 'intangible' invasions now understood to be 'physical,' such as particulate matter (smog, industrial fumes) and electromagnetic energy."


303. See RESTATEMENT (SECOND) OF TORTS § 217 cmts. b, c (1965) (stating that it is necessary that the trespasser know that his actions are intermeddling with the possessory interest of another).

304. Going back to first principles, Orin Kerr recognized that one reading of Blackstone offers a much broader conception of trespass. Blackstone emphasized the accordion-like quality of trespass in his Commentaries: "'[I]n its largest and most extensive sense,' Blackstone explained, trespass 'signifies any transgression or offence against the law of nature, of society, or of the country in which we live, whether it relates to a man's person or his property.'" Kerr, supra note 18, at 24 (alteration in original) (quoting 2 WILLIAM BLACKSTONE, COMMENTARIES *208). If Kerr is correct that the trespass theory could be interpreted in a broader frame, then the doctrine is not confined to a narrow reading of physical, property-based trespass. Contra id. ("On the other hand, trespass could be understood in a 'limited and confined sense' as only trespass to land.").


mere eyesight.308 Again, the one outlier case is Dow Chemical, which involved an enhanced surveillance of an industrial property.309

Although not conclusive, the foregoing argument creates a space for a new theory of trespass to include sense-enhancing invasions.310 Such a theory complements a new theory of personal curtilage in public, which this Article will apply in the next Part.

IV. THE THEORY OF PERSONAL CURTILAGE APPLIED

This Part applies the theory of personal curtilage by analyzing real-world surveillance of people in public. The goal is to determine the scope of Fourth Amendment protection in terms of new sense-enhancing technologies involving sound, sight, location, touch, and scent.

The theory of personal curtilage provides a workable test for which public activities should be granted Fourth Amendment protection from enhanced technological surveillance. If an activity or area falls within personal curtilage, then any intrusion into that space by physical or sense-enhancing means is a Fourth Amendment search. Such an area must be a defensible space. It must be marked by symbolic or actual barriers to sensory invasion. Finally, such a secure area must be closely tied to intimate associations that are personal in nature.

Going back to the initial hypothetical situation that begins this Article, imagine that authorities employ widespread surveillance technologies in a particular neighborhood.311 These techniques, as a matter of practical reality, eviscerate any expectation of privacy, because the public knows that audio, visual, sensory, and x-ray devices are in use.312 An ordinary citizen, who happens to be a

308. There is a legitimate counterargument, of course, that plain eyesight from a helicopter should still be categorized as sense-enhanced technology.


310. See Farahany, supra note 117, at 1249 (“The concurrences in Jones underscored that in the information age, defendants are less concerned about intrusions upon their real property and more concerned about intrusions upon their information.”).

311. See supra notes 2-6 and accompanying text.

312. See, e.g., Ryan Gallagher, DHS Considers Eavesdropping Tech for Spy Drones on Border, SLATE (Mar. 1, 2013, 5:49 PM), http://www.slate.com/blogs/future_tense/2013/03/01/eavesdropping_drones_may_be_next_for_border_surveillance_efforts_in_texas.html (acknowledging that drones in use at the international border may be equipped with audio sensors and eavesdropping capabilities).
federal judge,\(^\text{313}\) walks down the street seeking security from some or all of these law enforcement surveillance measures. What security can this judge have from these technologies in public, such that interference with that secure area would be a Fourth Amendment search? What does any citizen have to do to signal that such a secure area exists?

Answering this question requires isolating different types of secure interests. A citizen may wish to have security in personal aspects of communication, physical movements, geolocation, personal property—including items carried on her person or in bags—and even scent. Since surveillance technologies can invade and alter privacy in each of these interests without physical intrusion, how does the theory of personal curtilage reclaim or defend security in these interests?

A. Communication Interests

A person speaking in a public space may wish to have a private conversation with another person, either in person or on a cell phone. The speaker may be visible to the public, but may seek to secure the substance of the communication from the ears or enhanced audio surveillance of the listener. Because aural surveillance technology currently exists to make any public conversation audible,\(^\text{314}\) how can the theory of personal curtilage protect communications in public?

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\(^{313}\) Viewing our hypothetical citizen as a federal judge offers a different and perhaps more revealing lens on the problem of security. The idea derives from two comments from federal judges who in oral argument both raised the concern that their own conversations or activities could be monitored by law enforcement. In the oral arguments of United States v. Jones, Chief Justice Roberts asked the Solicitor General’s representative if the government’s position meant it could track the Justices without calling it a search. Transcript of Oral Argument at 9, United States v. Jones, 132 S. Ct. 945 (2012) (No. 10-1259), available at http://www.supremecourt.gov/oral_arguments/argument_transcripts/10-1259.pdf. In addition, in the oral argument of Kee v. City of Rowlett, Texas, 247 F.3d 206 (5th Cir. 2001), the Justices again turned to question whether the technologies could be applied against them in their daily lives. Transcript of Oral Argument, Kee v. City of Rowlett, 247 F.3d 206 (5th Cir. 2001) (No. 99-10555). See infra note 325 and accompanying text. As federal judges regularly are required to take positions that challenge executive power, they might well be concerned about the privacy of their deliberations and activities in public.

The first question is whether these private communications are defensible from unenhanced surveillance. Are private conversations in public something that can be secured against a government agent listening in without technological assistance? Under one reading of Katz’s reasonable expectation of privacy test, speakers have little to no reasonable expectation of privacy in public.\(^{315}\) As Justice Harlan stated in his Katz concurrence: “conversations in the open would not be protected against being overheard, for the expectation of privacy under the circumstances would be unreasonable.”\(^{316}\) Courts have not resolved, however, whether all conversations in public, even conversations demonstrably meant to be private, lose Fourth Amendment protections.\(^{317}\)

Custom provides a point of comparison. Judges discuss private matters in public spaces, be it over lunch in a restaurant or in the hallways of court.\(^{318}\) Lawyers hold private conversations with clients outside the confines of their offices.\(^{319}\) Lovers murmur in parks,

\(^{315}\). See Katz v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring); Robert P. Mosteller & Kenneth S. Broun, The Danger to Confidential Communications in the Mismatch Between the Fourth Amendment’s “Reasonable Expectation of Privacy” and the Confidentiality of Evidentiary Privileges, 32 Campbell L. Rev. 147 (2010) (discussing the limits of Fourth Amendment protections for privileged conversations).

\(^{316}\). Katz, 389 U.S. at 361. Of course, such reasoning was tempered by other statements in Katz that seem to support that certain private conversations might receive some constitutional protection. See id. at 351 (“What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection. But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected.” (citations omitted)).

\(^{317}\). See, e.g., Dorris v. Absher, 179 F.3d 420, 425 (6th Cir. 1999) (“The conversations took place only when no one else was present, and stopped when the telephone was being used or anyone turned onto the gravel road that was the only entrance to the office. The record thus indicates that the employees took great care to ensure that their conversations remained private.”); In re John Doe Trader Number One, 894 F.2d 240, 244 (7th Cir. 1990) (“The Supreme Court has long held that an agent can record those conversations which he can hear with his unaided ear.”); United States v. Agapito, 620 F.2d 324, 329 (2d Cir. 1980) (noting that loud conversations undermined a reasonable expectation of privacy); United States v. McIntyre, 582 F.2d 1221, 1224 (9th Cir. 1978) (finding privacy in conversations in an office, despite open door and presence of coworkers); Wesley v. WISN Div.-Hearst Corp., 806 F. Supp. 812, 814 (E.D. Wis. 1992) (discussing conversations in “hushed voices” relevant to determining reasonable expectation of privacy); Kemp v. Block, 607 F. Supp. 1262, 1264 (D. Nev. 1985) (noting that a loud voice overheard by coworkers undermined reasonable expectation of privacy and that “[o]ne of the tests used is to ascertain whether the defendant overheard the communication with the naked ear under uncontrived circumstances”).

\(^{318}\). Kee, 247 F.3d at 215 n.18.

\(^{319}\). Mosteller & Broun, supra note 315, at 154 (“Lawyers do occasionally speak with their
police consult supervisors on the streets, and millions of people risk revealing personal information whispering to cell phone receivers in public. As custom, these private conversations are defensible from unenhanced surveillance, and each likely warrants some protection.

As a legal matter, eavesdropping statutes and wiretapping regulations exist to protect recorded conversations that occur in public, signifying that spaces protected from surveillance can exist. 320 Katz itself was a case involving protected public—or quasi-public—communication. 321 A few federal courts have even tried to define the scope of a protected conversation in public. The United States Court of Appeals for the Fifth Circuit considered the issue of private communications in public and reasoned that a protected space can exist if individuals take certain precautions:

Primarily, courts have looked to considerations such as (1) the volume of the communication or conversation; (2) the proximity or potential of other individuals to overhear the conversation; (3) the potential for communications to be reported; (4) the affirmative actions taken by the speakers to shield their privacy; (5) the need for technological enhancements to hear the communications; and (6) the place or location of the oral communications as it relates to the subjective expectations of the individuals who are communicating. 322

These non-exclusive factors have guided courts in addressing the expectation of privacy issues that Katz left open. As described in a footnote in the Kee decision:

[While two federal judges may have a reasonable expectation of privacy in a hushed conversation on the courthouse steps, they might lose that expectation of privacy if they spoke loudly, if

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320. See Commonwealth v. Hyde, 750 N.E.2d 963, 964 (Mass. 2001) (challenging the use of a Massachusetts wiretapping statute to prosecute a criminal defendant for recording the police); Dina Mishra, Comment, Undermining Excessive Privacy for Police: Citizen Tape Recording to Check Police Officers’ Power, 117 YALE L.J. 1549, 1556 (2008).
321. Katz, 389 U.S. at 352 (recognizing “the vital role that the public telephone has come to play in private communication”).
they were surrounded by people who could eavesdrop, if one of
the judges reported the conversation to authorities, if either
party otherwise took actions that would expose the confidential-
ity of their communications, or if they failed to take any affirm-
ative steps to shield their privacy.\footnote{323}

Building from this understanding, the theory of personal
curtilage envisions a limited defensible space for private conver-
sations, even those undertaken in public. As long as individuals take
certain precautions, signifying the private nature of the conver-
sation, they should be able to carve out a protected space for their
conversations, even in public. To be clear, this protected space is not
based on a reasonable expectation of privacy, but the concept of
security and the right to exclude as informed by a theory of personal
curtilage.

The second step of a personal curtilage analysis is whether this
defensible space for communications can be marked in such a way
as to make it clear where the protective space begins and ends.
Personal curtilage would protect those conversations in which the
speaker took affirmative steps to keep others from hearing the
conversation. Choices of tone, volume, proximity to others, and steps
to indicate the private nature of the conversation would be indica-
tive of a claim of security.\footnote{324} People would have a greater claim to
security in the content of whispered conversations than in that of
shouted exclamations, not because only one could be
heard—enhanced surveillance could hear both—but because the
former signifies a marker of exclusion to others.\footnote{325} Other more
sophisticated procedures such as the use of counter-espionage
devices—sound scramblers, or high-frequency devices—and the like
would also obviously signify a claim of security.\footnote{326} Courts evaluating
the security of a personal conversation in public would then look to

\footnote{323. Id. at 215 n.18.}
\footnote{324. See cases cited supra note 318.}
\footnote{325. See United States v. Smith, 978 F.2d 171, 179 (5th Cir. 1992) (“Courts should bear in
mind that the issue is not whether it is conceivable that someone could eavesdrop on a
conversation but whether it is reasonable to expect privacy.”).}
\footnote{326. See, e.g., Nick Bilton, Shields for Privacy in a Smartphone World, N.Y. TIMES, June
25, 2012, at B5 (“Tony Fadell ... said cloaking devices would become available to protect
people’s privacy. What he called audio cloaks could take the form of a hat that rains down
white noise thwarting any possibility of recording someone’s chatter.”).}
these objective actions taken to signify security, similar to Mr. Katz closing the glass door behind him in the phone booth.327

The Fourth Amendment would protect most private conversations because of the personal nature of their content. It makes little sense to base security protections on the content of communications, as most private conversations would fall into the category of personal. After all, even Mr. Katz’s illegal bets to his bookie were the protected content underlying the Katz case.328

Finally, similar to a traditional curtilage analysis, the interest protected by this defined and protected space would need to be balanced with societal interests. Like the Dunn test, and the general focus on reasonableness, the protection of personal curtilage would not be absolute.329 The theory of personal curtilage would require a court to balance the protected area with other societal and law enforcement interests. The conclusion is not that all conversations in public are secure from enhanced aural surveillance, but only those conversations in which the speaker has taken affirmative action to demonstrate a claim of security from government surveillance.

B. Visual Surveillance Interests

Visual surveillance is both the most pervasive and unregulated form of public surveillance in use today.330 As discussed, video surveillance cameras,331 license plate readers,332 drones,333 and good

327. See Kee, 247 F.3d at 213 n.11 (“For example, Katz had a negligible property or possessory interest in the telephone booth; did not have an enforceable right to exclude others from the property; and while legitimately on the premises, did not gain an expectation of privacy from that position. Instead, the constitutional protections stemmed from the fact that he subjectively expected his conversations to be private and that he took the normal precautions available to him to call from inside a booth.”).
329. See supra notes 209-11 and accompanying text.
331. E.g., Slobogin, supra note 129, at 221.
332. See Markoff, infra note 360.
old-fashioned police observation are in use and, under current constitutional law, are not considered searches for Fourth Amendment purposes.\(^{334}\) From *Hester*’s “open fields”\(^{335}\) to *Katz*’s “exposure,”\(^{336}\) individuals have no expectation of privacy in public for activities otherwise in plain view.\(^{337}\) The result is that what we wear, what we do, whom we meet, and even our facial expressions and gestures are exposed without any constitutional protection.\(^{338}\) Although people in public have always been observed by others, the prevalence of technology has amplified this exposure and reduced any expectation of privacy.\(^{339}\)

Personal curtilage responds to this unregulated surveillance reality with a new framework for analysis. It recognizes a defensible

\(^{334}\) See Slobogin, supra note 129, at 236 (“All courts that have considered application of the Fourth Amendment to cameras aimed at public streets or other areas frequented by a large number of people have declared that such surveillance is not a search, on the ground that any expectation of privacy one might have in these areas is unreasonable.”) (citation omitted); see also Ric Simmons, *Technology-Enhanced Surveillance by Law Enforcement Officials*, 60 N.Y.U. ANN. SURV. AM. L. 711, 725 n.46 (2005).

\(^{335}\) See supra notes 201-02 and accompanying text.

\(^{336}\) See supra notes 108-09 and accompanying text.


\(^{339}\) See Simmons, supra note 123, at 1332-35.
space from public visual surveillance, but also recognizes that marking that space may prove to be quite difficult in practice. Building upon privacy law conceptions of seclusion and intrusion, personal curtilage reclaims a space from intrusive public surveillance beyond the current protections of the reasonable expectation of privacy test.  

This space, constitutionally defensible from visual surveillance in public, derives from Fourth Amendment and privacy law scholarship. Both doctrines recognize that whereas unenhanced surveillance presents no grounds for security or privacy claims, overly intrusive surveillance that reveals details unavailable by ordinary means should be protected against.

First, several Fourth Amendment scholars have recognized a limited right to be free from extensive governmental visual surveillance. Professor Slobogin, in a seminal article on the subject, wrote of a protected “right to anonymity” that can be compromised by invasive, omnipresent public surveillance. Other scholars have chosen to focus on “the architecture of privacy” in order to find protected public spaces. Still others have looked to reframe the understanding of privacy as a collective right, comparing it to an ongoing struggle against government observation. The definitions and analysis differ, but courts have recognized some space free from continuous governmental observation, even in public.

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341. Slobogin, supra note 129, at 217 (“[W]e all possess a ‘right to anonymity,’ even when in public.”); see also Slobogin, supra note 169 (noting the intrusiveness of physical and transactional surveillance on the right to anonymity and arguing for more regulation of such surveillance); ALAN F. WESTIN, PRIVACY AND FREEDOM 31 (1970) (“The third state of privacy, anonymity, occurs when the individual is in public places ... but still seeks, and finds, freedom from identification and surveillance.”).


344. E.g., Andrew E. Taslitz, Privacy as Struggle, 44 SAN DIEGO L. REV. 501 (2007); Taslitz, supra note 11, at 158-69.

345. E.g., United States v. Taketa, 923 F.2d 665, 677 (9th Cir. 1991) (stating in dicta that even in places without a general privacy right, a person may have an expectation of privacy
Privacy scholars have echoed this constitutional understanding, carving out a protected public space against unreasonable governmental intrusion.\textsuperscript{346} Building off the common law tort of intrusion,\textsuperscript{347} scholars such as Jane Bambauer have developed a new vision of intrusion appropriate for a surveillance world.\textsuperscript{348} As Professor Bambauer explains:

The tort of intrusion imposes liability on anybody who intentionally intrudes on the seclusion of another if the intrusion would be “highly offensive to a reasonable person.” The intrusion tort protects an interest in respite from observation and judgment (when the expectation of seclusion is reasonable). A right to seclusion is justified by a number of theories: Seclusion allows us to engage in “productive secrets”—surprises may be planned, plots may be concocted, and new aspects of our individuality can be tried out without censure.\textsuperscript{349}

Although not easily defined, the tort focuses on the prying nature of the visual observation.\textsuperscript{350}

\begin{quote}
against being videotaped in a public area); State v. Thomas, 642 N.E.2d 240, 246 (Ind. Ct. App. 1994) (recognizing that certain surveillance may violate the Fourth Amendment if it is from a non-public vantage point).

\textsuperscript{346.} But see Heidi Reamer Anderson, \textit{The Mythical Right to Obscurity: A Pragmatic Defense of No Privacy in Public}, 7 US: J.L. & POLY FOR INFO. SOCY 543 (2012); Andrew Jay McClurg, \textit{Bringing Privacy Law out of the Closet: A Tort Theory of Liability for Intrusions in Public Places}, 73 N.C. L. REV. 989, 1076 (1995) (“[T]here is no longer any viable tort remedy for injuries resulting from the dissemination of true information concerning an individual, no matter how private the information or how offensive the dissemination would be to a reasonable person.”).

\textsuperscript{347.} \textit{Restatement (Second) of Torts} § 652D (1977) (“One who gives publicity to a matter concerning the private life of another is subject to liability to the other for invasion of his privacy, if the matter publicized is of a kind that (a) would be highly offensive to a reasonable person, and (b) is not of legitimate concern to the public.”); William L. Prosser, \textit{Privacy}, 48 CALIF. L. REV. 383, 389 (1960) (defining one kind of tortious invasion of privacy as “[i]ntrusion upon the plaintiff’s seclusion or solitude, or into his private affairs”).


\textsuperscript{349.} \textit{Id.} at 230-31.

\textsuperscript{350.} \textit{See id.} at 230 (“Suppose an obstetrician invites a friend to watch him perform a childbirth. The expectant mother mistakenly assumes that the friend, dressed in scrubs and introduced as a ‘helper,’ is a medical student or surgical assistant. The friend’s observation may have been quite valuable to him personally. Perhaps it indirectly improved the world by inspiring the friend to attend nursing school. Nevertheless, the observation was tortious.”).
\end{quote}
Intrusion guards our affairs from the “prying eyes or ears of others.” It only offers a remedy when the eyes and ears are prying—that is, when an intruder has notice of a person’s reasonable expectation of seclusion and intentionally makes an observation anyway. An intrusion requires a deliberate investigation. But by the same token, when a deliberate, obnoxious observation has taken place, liability is appropriate even in instances where the information learned ends up being highly valuable or newsworthy.351

Obtaining information about public activities available only through the use of sense-enhancing surveillance technologies constitutes prying.352 For the theory of personal curtilage, the key is that sense-enhancing technology works to reveal something unavailable with ordinary visual surveillance, which the individual has given notice they do not want revealed.

This defensible space is necessarily a limited one, and primarily will be protected from enhanced visual surveillance that reveals not just the presence of a person at a particular location but intimate details that are closer to the idea of intrusion or prying. For example, because video surveillance provides the ability to magnify, link, and observe other details not accessible through ordinary observation,353 the surveillance will reveal certain details beyond mere presence. Issues of magnification,354 biometrics,355 or linked


352. In the context of a tort, as in the context of a constitutional search, any remedy may turn on the extent rather than the fact of the intrusion.

353. Blitz, supra note 342, at 1383 (“Networks of video cam[er]as function not only as video cameras, but also, when linked together and given the capacity to identify and lock onto a person, as tracking devices. Supplemented with zoom capacities and infrared detectors, they might reveal features of a person that are normally invisible even to bystanders only a few yards away. And with the aid of biometric identification devices, they might also provide investigators with information of a sort that is not normally sensed at all. They might reveal the name of an unknown individual in a photograph or videotape, and investigators might then link this identifying information to other personal information.”).


facial recognition databases represent new intrusions beyond the collection of simple observational facts. Although perhaps a video of a judge standing inside a private cemetery might not be protected, the enhanced video close-up of a judge’s tears at the cemetery might be. If, as this Article will discuss, an individual has also taken steps to avoid ordinary visual observation, then the use of the enhanced technology intrudes on this sense of seclusion.

As noted, that a constitutionally defensible space exists does not alone establish a claim of personal curtilage. In addition, there must be markers to define the space. Certain obvious markers exist in theory. One could wear a mask or disguise in public. Technology now exists to thwart facial recognition devices, blind license plate

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357. See generally Elizabeth E. Joh, Privacy Protests: Surveillance Evasion and Fourth AmendmentSuspicion, 55 ARIZ. L. REV. 997, 997 (2013) (describing “privacy protests: actions individuals take to block or to thwart surveillance for reasons unrelated to criminal wrongdoing”) (citations omitted); Nick Bilton, Shields for Privacy in a Smartphone World, N.Y. TIMES, June 25, 2012, at B5 (“Other counter-recording technologies could be hidden in a necklace that shoots out infrared light and blurs pictures taken in your direction; or a radarlike watch that vibrates when an audio recorder is active nearby.”).


359. E.g., Robin Feldman, Considerations on the Emerging Implementation of Biometric Technology, 25 HASTINGS COMM. & ENT. L.J. 653, 663-64 (2003) (“[T]he accuracy rate of a facial imaging system may vary tremendously when tested against those actively trying to conceal their appearance as opposed to those who are trying to be recognized for access. In a recent demonstration of the problem, National Geographic magazine asked a former CIA operative to try to fool a facial imaging system using techniques such as glasses, facial hair and head positioning. When the system tried to match the operative's current photo against various types of disguised images, the level of correlation ranged from roughly 60 percent to 80 percent.”) (citing David Shenk, Watching You: The World of High-Tech Surveillance, 204 NAT'L GEOGRAPHIC 3, 18 (Nov. 2003)); Jimmy Stamp, The Privacy Wars: Goggles That Block
readers, and otherwise directly respond to visual surveillance. In fact, technology now exists to counter drone surveillance, including, quite inventively, “anti-drone” fashion accessories. One could live like certain celebrities, ducking into underground garages, using bodyguards and body doubles, and essentially maintaining public privacy by avoiding public events. The methods underlying these markers are, of course, neither practical nor simple, but do create some protection beyond the reasonable expectation of privacy test.


362. Tim Maly, Anti-Drone Camouflage: What to Wear in Total Surveillance, WIRED (Jan. 17, 2013, 3:14 PM), http://www.wired.com/design/2013/01/anti-drone-camouflage-apparel/ (describing artist Adam Harvey’s collection of “Stealth Wear” clothing, which “includes an anti-drone hoodie and scarf that are designed to thwart the thermal-imaging technology widely used by UAVs, and the OFF Pocket, a phone accessory that blocks all incoming and outgoing communication from your phone”); Catherine New, Domestic Drone Countermeasures, Oregon Company, To Sell Defense Systems Direct To Consumers, HUFFINGTON POST (Mar. 20, 2013, 5:09 PM), http://www.huffingtonpost.com/2013/03/20/domestic-drone-countermeasures_n_2916974.html (“Oregon-based company Domestic Drone Countermeasures announced last month that it would sell customized anti-drone defense systems to anyone interested in a little extra privacy.... Domestic Drone Countermeasures’ anti-drone system would not disable drone technology nor jam the machines, ... but would neutralize the ability of a small air-bound drone to capture sound and images through its on-board cameras, video recorders and microphones.”).

363. The difficulties of celebrities offer an ironic twist in that the reason for the surveillance is precisely that these individuals have put themselves out in the public eye.

364. These steps, of course, raise the real question of how far should an individual be required to go to assert security. National security professionals use secure offices, secure computers, and secure phone lines on a daily basis. Luppen B. Luppen, Note, Just When I Thought I Was Out, They Pull Me Back In: Executive Power and the Novel Reorganization of Executive Functions and the Novel Reorganization of Executive Functions, 115 WASH. & LEE L. REV. 1115, 1124-25 (2007) (“[Those with top secret clearances] handle information that is carefully isolated behind alarmed vault doors and in burglary resistant safes or can be accessed only through secure computer networks or in hardened and well-defended facilities.”) (citations omitted); see also Vicki Divoll, The “Full Access Doctrine”: Congress’s Constitutional Entitlement to National Security Information from the Executives,
The final element is the intimacy aspect involved in visual surveillance. Most of our public activities do not involve intimate personal activities. Yet, the theory of personal curtilage defends against those occasions when there should be protection.\textsuperscript{365} In certain cases, use of magnification, linkage of visual surveillance feeds, or aggregation of data points that reveal intimacies unknowable with old-fashioned surveillance might reveal enough about personal activities to warrant Fourth Amendment protection.\textsuperscript{366} As with the traditional curtilage test, the ultimate Fourth Amendment decision will involve a balancing of interests on a case-by-case basis.

Thus, our federal judge will have only a limited protection from visual surveillance under a personal curtilage theory. Although it is a greater protection than under current Fourth Amendment law, which provides no protection against visual surveillance in public, it may not offer much comfort. However, as surveillance technologies grow in scope and capabilities, and a reasonable expectation of privacy shrinks, the framework offers a stronger theory to carve out and claim a defensible space.

\textbf{C. Geolocational Interests}

Where we go reveals what we do, and perhaps a measure of who we are or want to be. Location, when combined with information about individuals, organizations, and services in an area, can produce a wealth of information about a person. Geolocational surveillance involves a host of tracking technologies including

\begin{footnotesize}
\begin{enumerate}
\item[34] HARV. J.L. & PUB. POLY 493, 505 n.42 (2011) (“The SSCI and the HPSCI conduct all of their business in a ‘Secure Compartmented Information Facility’ (SCIF). The classified materials the executive entrusts to Congress are kept in vaults within the SCIF, and a professional security staff monitors them. Any member of Congress who wishes to read classified material must do so in a committee SCIF, under the supervision of security personnel.”). Yet, the start-up costs to establish that type of secure network are prohibitive. GPS devices can be counteracted with scrambling devices. Individuals could be required to don costumes and practice countersurveillance tactics worthy of a spy novel. LINDSAY MORAN, BLOWING MY COVER: MY LIFE AS A CIA SPY 139-42 (2005) (discussing surveillance training). These affirmative assertions of security would be sufficient; but they may also not be necessary when more common sense practices would do.
\item[365] One can imagine a burial for a pet in the backyard, a prayerful walk in the woods, or a midnight skinny dip as all public, intimate events that deserve a claim of protection.
\item[366] \textit{E.g.}, United States v. Maynard, 615 F.3d 544 (D.C. Cir. 2010), \textit{aff’d in part sub nom.} United States v. Jones, 132 S. Ct. 945 (2012).\end{enumerate}
\end{footnotesize}
highly sophisticated GPS tracking devices, low-tech beepers, and other devices that reveal the location of the person in real time.  

Again, the first question is whether geolocational tracking information is the type of activity against which a judge, or citizen, can claim a defensible space. The Supreme Court in Jones resolved one aspect of this question quite easily. Attaching a tracking device by means of physical trespass, whether to a car or a person, clearly constitutes invasion of a recognized defensible space. This would be true both for attaching a geolocational tracking device to a car or person. There exists a recognized defensible space from having one’s property—or person—physically intruded upon in order to attach a tracking device.

The Jones Court, as discussed, avoided deciding the more challenging question of whether obtaining the same geolocational information without a physical intrusion constitutes a Fourth Amendment search. The five concurring Justices appear to recognize that long-term tracking for most crimes would violate a reasonable expectation of privacy. Further, in Karo and Knotts, two early beeper cases, the Supreme Court held that a search occurs when police use technology to obtain information not otherwise available to public observation, such as the location of a barrel in a private home, but not when the beeper merely augments the visual observation of a suspect travelling in public.

Reading Karo and Knotts together, a reasonable expectation of privacy test might protect only information in homes that could not be obtained through ordinary visual observation.

368. As Justice Scalia stated in Jones, physically occupying private property for the purpose of obtaining information constitutes a Fourth Amendment search. Jones, 132 S. Ct. at 949.
369. This conclusion results from adding the votes in both Justice Sotomayor’s concurring opinion and Justice Alito’s concurring opinion written for four Justices. See id. at 955, 964.
373. Knotts, 460 U.S. at 276 (“A person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another.”); see Kyllo v. United States, 533 U.S. 27, 34 (2001).
374. This is also supported by the reasoning in Kyllo.
A theory of personal curtilage expands this protection and recognizes an ability to defend against extended and aggregated locational tracking that reveals information not available through ordinary visual observation in public. Although geolocational tracking provides an odd fit for an analogy based on “space,” the same arguments in support of a defense against intrusion, or for anonymity, hold. One can see this most easily in two contexts. First, when information about the places visited reveals information that could not be obtained by mere visual surveillance, we have a situation that fits the expanded Knotts/Karo rule. Second, the observation of patterns through the aggregation of data, which could not be known through mere visual surveillance, fits with the Jones concurrences’ rule. As with visual surveillance, geolocational security includes freedom from ubiquitous data collection and the resulting technological aggregation of such data unavailable through ordinary means.

Again, stating that a defensible space for geolocational security exists is only the first step. To establish protection under a personal curtilage theory, an individual would also have to mark out this expectation of security from surveillance. What could our federal judge do to prevent locational tracking that symbolically or actually marks out a secure space? What if the judge did not want the government to know about a medical condition or substance abuse problem?

Defining areas of personal locational security is difficult in practice. Clearly, an individual could post signs—bumper stickers—stating “do not track” on a car. Individuals could employ GPS scrambling devices or practice countersurveillance techniques, including switching cars or having decoy cars. One could drive someone else’s car to avoid geolocational tracking. In fact, Antoine Jones did just that as the car at issue in the case was registered to

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375. Again, this Article focuses only on governmental surveillance, not third-party surveillance.
376. For example, locational data can tell not only that a person was at a health clinic, but how long an individual was at the clinic, how often they returned, and if the tracking is tied to the person—not just a car—it would clearly provide information that could not be observed in public.
his wife. 378 One could drive at night, or intentionally take mass transit, making physical tracking by law enforcement difficult. Though such evasive tactics would show a desire for security from tracking, these markers would also have the unintended consequence of identifying those who sought security from surveillance, unless adopted by everyone. 379 These tactics are also inconvenient and impractical for ordinary citizens who would prefer security from geolocational surveillance but would rather not live like counter-espionage agents.

The line protecting only intimate details is also hard to draw for locational data because, although a significant amount of personal information could be revealed through location, the lines separating the private from the public are not clear. Going to the doctor for an annual check-up might not reveal anything more than the fact that one takes responsibility for one’s health. Going to the obstetrician and then an abortion clinic might reveal a significant life event. Though both may reveal personal information made obvious by geographic location, those stemming from the latter type of situation are far more intimate. Yet, if our federal judge took the necessary precautions to mask her location and her travel out of a concern for security from governmental observation, these steps should provide a measure of protection. In short, locational interests may be protected under a theory of personal curtilage, although perhaps not in any useful form. Individuals will be able to take certain steps, and those steps will raise the level of security of their movements. But most people—criminals and federal judges—will not take the necessary steps to signal a greater claim to security in their locational data. In this way, personal curtilage offers an equivalent, but perhaps not superior, framework to Katz for protecting against geolocational surveillance.

**D. Personal Property Interests**

Individuals carry personal effects every day. We carry items in pockets, purses, wallets, briefcases, and under our clothes. Gener-

379. Certainly, initially, it might be a wise use of police resources to focus on those individuals who purchased “do not track” stickers and scrambling devices, as they might have something to hide.
ally, we expect that items hidden in containers\textsuperscript{380} or under clothes\textsuperscript{381} will remain secure from observation from others, even when we are out in public.\textsuperscript{382} Yet, as discussed, backscatter and other imaging technologies exist that can reveal items of contraband or curiosity through x-ray-like images.\textsuperscript{383} Police can now see whether you are carrying a gun or gum in your purse.\textsuperscript{384} The general protections of basic physics no longer define the limits of surveillance.\textsuperscript{385}

As custom and case law have well established, this space is defensible and warrants Fourth Amendment protection, whether in closed containers\textsuperscript{386} or under clothing. Two lines of cases exemplify this traditional understanding of security. First, the Supreme Court has required a heightened level of suspicion to open closed

\begin{itemize}
  \item \textsuperscript{380} United States v. Donnes, 947 F.2d 1430, 1435 (10th Cir. 1991) (“[A]ll containers ... will receive the full protection of the fourth amendment during a police search [if the owner has] a reasonable expectation of privacy in the contents.” (citations omitted) (internal quotation marks omitted)).
  \item \textsuperscript{381} United States v. Askew, 529 F.3d 1119, 1129 (D.C. Cir. 2008) (en banc) (holding that the defendant had a reasonable expectation of privacy for the area underneath his jacket); Michael C. v. Gresbach, 526 F.3d 1008, 1015 (7th Cir. 2008) (holding that the plaintiffs had a reasonable expectation of privacy in body parts covered by clothing).
  \item \textsuperscript{382} One caveat to this statement is items that are strictly contraband under a binary search analysis. Illinois v. Caballes, 543 U.S. 405, 408-09 (2005).
  \item \textsuperscript{385} Jim Harper, Reforming Fourth Amendment Privacy Doctrine, 57 Am. U. L. Rev. 1381, 1388 (2008).
  \item \textsuperscript{386} E.g., MacWade v. Kelly, 460 F.3d 260, 272-73 (2d Cir. 2006) (holding that the plaintiffs had a reasonable expectation of privacy in the contents of opaque bags); United States v. Gust, 405 F.3d 797, 803-05 (9th Cir. 2005) (holding that the defendant had a reasonable expectation of privacy in a plastic case because it was not identifiable as gun case to the general public); Doe ex rel. Doe v. Little Rock Sch. Dist., 380 F.3d 349, 353 (8th Cir. 2004) (holding that students had a reasonable expectation of privacy in their bags because the bags concealed contents from view).
\end{itemize}
containers, even those containers associated with individuals suspected of crime.\textsuperscript{387} Although exceptions exist for searches incident to arrest\textsuperscript{388} and when containers are in automobiles\textsuperscript{389} the closed container doctrine demonstrates the recognition of a defensible space of personal property. Similarly, searches of persons, including physical manipulation of objects\textsuperscript{390} or effects\textsuperscript{391} on or near those persons, require a heightened level of suspicion to invade that protected space.\textsuperscript{392} The understanding that individuals have security and privacy interests in those protected spaces, including the right to be free from governmental intrusion, underlies these decisions.\textsuperscript{393}

Custom and case law also provide us with the means to mark out our expectation of security. We use pockets and bags to carry our belongings. We wear unrevealing clothes to hide what we want to hide from public view. We undertake these actions so habitually that we rarely think of them as marking out a space of security. But, for purposes of personal curtilage, these steps would be sufficient to establish a defensible, delineated space of security. To maintain that security, individuals will need to continue to mark it as a space for protection.

In terms of intimate detail, the things we keep in our pockets are generally personal and reveal some level of private information

\textsuperscript{387} See United States v. Ross, 456 U.S. 798, 822 (1982) (“For just as the most frail cottage in the kingdom is absolutely entitled to the same guarantees of privacy as the most majestic mansion, so also may a traveler who carries a toothbrush and a few articles of clothing in a paper bag or knotted scarf claim an equal right to conceal his possessions from official inspection as the sophisticated executive with the locked attaché case.” (citation omitted)); United States v. Chadwick, 433 U.S. 1, 13 (1977) (“Unlike an automobile, whose primary function is transportation, luggage is intended as a repository of personal effects. In sum, a person’s expectations of privacy in personal luggage are substantially greater than in an automobile.”), \textit{abrogated by} California v. Acevedo, 500 U.S. 565 (1991)).


\textsuperscript{390} \textit{E.g.}, Minnesota v. Dickerson, 508 U.S. 366, 378 (1993).


\textsuperscript{392} \textit{E.g.}, \textit{Acevedo}, 500 U.S. at 580 (requiring probable cause for a search of a closed container in a vehicle).

\textsuperscript{393} See, \textit{e.g.}, Terry v. Ohio, 392 U.S. 1, 9 (1968) (“No right is held more sacred, or is more carefully guarded, by the common law, than the right of every individual to the possession and control of his own person, free from all restraint or interference of others, unless by clear and unquestionable authority of law.”) (quoting Union Pac. R. Co. v. Botsford, 141 U.S. 250, 251 (1891))).
about ourselves.\footnote{Cf. \emph{Acevedo}, 500 U.S. at 572 (acknowledging a “heightened privacy expectation in personal luggage”).} In fact, almost by definition, because of the item’s closeness to the body or person, it retains a heightened protection.\footnote{\textit{See \textit{Wyoming v. Houghton}, 526 U.S. 295, 308 (1999) (Breyer, J., concurring) (“Purses are special containers. They are repositories of especially personal items that people generally like to keep with them at all times. So I am tempted to say that a search of a purse involves an intrusion so similar to a search of one’s person that the same rule should govern both. However, given this Court’s prior cases, I cannot argue that the fact that the container was a purse \textit{automatically} makes a legal difference, for the Court has warned against trying to make that kind of distinction. But I can say that it would matter if a woman’s purse, like a man’s billfold, were attached to her person. It might then amount to a kind of ‘outer clothing,’ which under the Court’s cases would properly receive increased protection.”).} Although there is nothing inherently revealing about the business card in my wallet, its placement in that area makes the information protected.\footnote{\textit{See \textit{Terry}, 392 U.S. at 29-30.}} Personal curtilage would respect that choice as a protected area.

For concealed personal property, the theory of personal curtilage may well provide more protection than the reasonable expectation of privacy test. \footnote{\textit{Alyson L. Rosenberg, Comment, \textit{Passive Millimeter Wave Imaging: A New Weapon in the Fight Against Crime or a Fourth Amendment Violation?}, 9 ALB. L.J. SCI. & TECH. 135, 136-37 (1998); Andy Greenberg, \textit{Full-Body Scan Technology Deployed in Street-Roving Vans, \textit{Forbes}} (Aug. 24, 2010, 12:00 PM), http://www.forbes.com/sites/andygreenberg/2010/08/24/full-body-scan-technology-deployed-in-street-roving-vans/.} X-ray and other see-through technology will eventually make all concealed items potentially observable.\footnote{\textit{See, e.g., Terrell v. State, 239 A.2d 128, 130 (Md. Ct. Spec. App. 1968).}} Bodies, and items we carry on our bodies, will enjoy no more protection in public than when subjected to TSA imaging technology in a routine airport screening. Yet, with the theory of personal curtilage, we might be able to claim an interest in security, even when technology has erased our privacy.

\textbf{E. Odor/Vapor/Molecular Interests}

Human beings smell.\footnote{\textit{Elizabeth Holmes, \textit{Perfume Bottles Gone Wild}, \textit{Wall St. J.}, June 7, 2012, at D1 (reporting that sales of fragrances in the United States in 2011 neared $5.8 billion).}} Billions of dollars in personal hygiene products, air fresheners, and air purifiers exist to mask the human scent and its byproducts.\footnote{\textit{See \textit{Terry}, 392 U.S. at 29-30.}} Human beings possess and carry things that smell. Technological devices now exist to vacuum and test the
molecular vapors emitted from persons and machines. These new technologies purport to detect everything from heightened sweat on nervous people to chemical weapons.

People retain no level of Fourth Amendment privacy in scent because it is considered a naturally occurring byproduct of human existence or lifestyle. Over the years, courts have developed the “plain smell” test that essentially allows police officers to develop probable cause and reasonable suspicion using their own unaided faculties. Such a plain smell sniff is not a search for Fourth Amendment purposes. In addition, courts have considered trained police dogs sniffing out contraband in luggage and cars not to be a search for Fourth Amendment purposes. Dog sniffs of people, if invasive enough, may constitute a search, although courts disagree on the matter. Courts have not decided the issue of whether a

400. New Homeland Security Laser Scanner Reads People at Molecular Level, CBS (July 11, 2012, 11:01 AM), http://washington.cbslocal.com/2012/07/11/new-homeland-security-laser-scanner-reads-people-at-molecular-level/ (“This laser-based scanner—which can be used 164-feet away—could read everything from a person’s adrenaline levels, to traces of gun powder on a person’s clothes, to illegal substances—and it can all be done without a physical search. It also could be used on multiple people at a time, eliminating random searches at airports.”).


402. See Brief of Amicus Curiae Cato Institute Supporting Respondent at 9, Florida v. Jardines, 133 S. Ct. 1409 (2013) (No. 11-564), 2012 WL 2641846 *9 (“A DHS program that might be directed not only at persons, but also at their houses and effects, is called the Remote Vapor Inspection System (or RVIS). RVIS generates laser beams at various frequencies to be aimed at a target vapor. Beams reflected and scattered back to the sensor head reveal spectral ‘signatures’ that can be compared with the signatures of sought-after gasses and particulates.... Using RVIS, government agents might remotely examine the molecular content of the air in houses and cars, quietly and routinely explore the gasses exiting houses through chimneys and air ducts, and perhaps even silently inspect any person’s exhaled breath.” (citations omitted) (internal quotation marks omitted)).


405. United States v. Kelly, 302 F.3d 291, 293 n.1 (5th Cir. 2002) (noting that an up-close sniff of a person constitutes a search if the dog contacts the person’s body); State v. Boyce, 723 P.2d 28, 31 (Wash. Ct. App. 1986) (concluding that the Washington Constitution requires
high-tech “smell-o-matic” scent machine, which Justice Kagan hypothetically proposed during the *Florida v. Jardines* oral argument, might change the analysis.

Although no reasonable expectation of privacy may lie in one's scent, this does not negate an expectation of security under a personal curtilage theory. Personal curtilage first asks whether the Fourth Amendment may defend an area or activity against unenhanced government surveillance. Both high-end and low-end masking agents—fancy perfume or mothballs—can prevent law enforcement from smelling hidden items. In *Florida v. Jardines*, the Supreme Court evaluated an officer's investigation of a home whose occupants dispersed mothballs, the officer believed, to mask the smell of marijuana. The personal curtilage theory would consider this action sufficient to claim a defensible space against sniffer technology.

By objectively indicating a desire for security, masking agents also help define the second step of the analysis. Plainly, Jardines covered his house with a mothball smell precisely in order to defend against law enforcement—and neighborhood—interference with his activities. Similarly, if one were travelling with bags full of illegally obtained exotic mushrooms or wildflowers, use of a masking agent to cover the smell would signal a desire for security from inspection. Although individuals might believe that the use of masking agents arouses the suspicion of police, such agents also serve as barriers to surveillance.

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406. See Transcript of Oral Argument at 16-17, *Jardines*, 133 S. Ct. 1409 (No. 11-564) (“JUSTICE KAGAN: So does that mean that if we invented some kind of little machine called a, you know, smell-o-matic and the police officer had this smell-o-matic machine, and it alerted to the exact same things that a dog alerts to, it alerted to a set of drugs, meth and marijuana and whatever else, the police officer could not come to the front door and use that machine?”).

407. See, e.g., Cecil J. Hunt, II, *Calling in the Dogs: Suspcionless Sniff Searches and Reasonable Expectations of Privacy*, 56 CASE W. RES. L. REV. 285, 287-89 (2005) (“It is clear that whether the evidence is gathered by a live drug-sniffing dog or an electronic handheld device, the legal principles involved are the same.”).

408. The key is the affirmative decision to mask the smell.


410. *Contra id.* at 35-36.

411. See *id.* at 35.

412. As discussed in the oral arguments of *Florida v. Jardines*, the officer said he suspected marijuana because he considered the scent of mothballs a masking agent. *Id.* at 19.
The issue of intimacy is complicated when it comes to scent. Clearly, personal scents may be quite intimate, embarrassing, or revealing. If a device could detect alcohol vapors emanating from a body that had been drinking heavily, this information would be personal and private. Other human scents, pheromones, or byproducts also deserve some protection. In contrast, the information revealed by a device that could detect vapors from a particular chemical compound in a rare petunia stolen from a national park would be much less personal.413 As in the other line drawing situations, intimacy will be one factor in the analysis and may, like other discussions of curtilage, be a reason not to find protection. Yet, as this Article has discussed, the theory of personal curtilage provides protections that do not exist at all under a reasonable expectation of privacy theory.

F. Concluding Thoughts

In a world of panoptic surveillance, one could concede that individuals have lost any expectation of privacy or security in public. Or, one could design a framework to carve out certain constitutionally defensible areas within that public space that balances the needs of security with individual liberty. Like the creation of the curtilage principle in the first place, this Article argues that there needs to be an evolution of protection from the four fixed walls to some greater space. Personal curtilage offers that evolution to protect individuals in public from sense-enhancing technologies.

To answer the question that starts this Article, a limited Fourth Amendment space can exist free from enhanced technological surveillance in public. The theory of personal curtilage presents an objective test modeled on the Dunn curtilage analysis.414 This framework allows for security from sense-enhancing technological surveillance in public.415 It recognizes that the technology that now

413. See generally Brief of Amici Curiae Fourth Amendment Scholars in Support of Respondent, Jardines, 133 S. Ct. 1409 (No. 11-564), 2012 WL 2641847 ("Petunias and cocaine produce methyl benzoate[,] a decomposition product or break-down product that is produced when cocaine hydrochloride is exposed to humid air.").


415. See supra Part III.C.
exists—and will exist in the future—will erase any privacy interests if expectations of privacy function as the only test.\textsuperscript{416} Thus, it shifts the locus of control from society’s expectation to an individual’s actions.\textsuperscript{417} It is an imperfect test. For some technologies, this theory of personal curtilage provides no more protection than does the current doctrine. Yet, its virtue is that it provides the flexibility to react and counter encroaching surveillance technologies in ways that the current standard cannot.

V. CONCERNS AND QUESTIONS

The theory of personal curtilage presents several obvious concerns in application. First, is it better than the current standard of a reasonable expectation of privacy test? Second, is it adaptable to new, not-yet-developed technologies? Third, can it be applied across state and federal courts in a consistent manner? Each of these concerns is valid and will be addressed below.

Is the personal curtilage theory better than the reasonable expectation of privacy theory? Such normative claims are probably better left for others to evaluate, but personal curtilage offers two key advantages over the current Fourth Amendment paradigm. First, in the face of omnipresent surveillance technology, it refuses to concede that individuals retain no protections in public. In carving out a space of personal security, even if limited and difficult to sustain, the theory still maintains some protected space. If, as may happen in the future, aerial surveillance devices can observe, listen, track, and link observational data to other surveillance technologies, individuals may need to maintain such a space. Second, personal curtilage focuses on individuals as the key actors to control this secure space. Unlike the ex post determination of societal expectations of privacy by judges, personal curtilage places some measure of prospective personal responsibility in the hands of individuals. This shift may be impractical, but it will have important educational benefits for citizens.\textsuperscript{418} Under one reading, the

\textsuperscript{416} See supra notes 166-71 and accompanying text.
\textsuperscript{417} See supra Part III.B.
\textsuperscript{418} Under the current doctrine, little incentive exists to determine the existence of and prevent invasive surveillance. However, if courts respect the steps individuals take to protect their rights, then the analysis and incentives shift. In this way, putting the responsibility for
expectation of privacy test creates a passive citizenry, ignorant of technological change, and dependent on courts. Placing the onus on citizens to act, react, and claim ownership of constitutionally protected spaces may have important secondary benefits in the form of participation and engagement with these constitutional issues.

Is the personal curtilage theory adaptable to new technological surveillance innovations? Fourth Amendment doctrine has traditionally lagged behind new technologies. The incremental case-by-case structure is, by design, a retrospective rather than a prospective enterprise. The result is that any new doctrinal test must be flexible enough to adapt to new technologies. As stated, personal curtilage invites flexibility because it invites reaction. Although seemingly impractical today, self-protection technologies may become the norm. In an earlier era, no one locked a bicycle or put an alarm on a car, but now almost everyone does. Perhaps the same will happen to image blocking or GPS scrambling devices. The value of personal curtilage is that it encourages a technological defense to technological intrusion. In large measure, it invites active citizens to resist active governmental surveillance.

Finally, will personal curtilage be applied in a consistent manner? The answer is likely no. Any study of the doctrine of traditional curtilage will reveal a haphazard, case-by-case approach that is incredibly fact dependent.419 The same will likely happen with the theory of personal curtilage. Yet, this inconsistency is a virtue not a vice. As may be evident from the argument laid out throughout this Article, defining a space, marking it, and connecting it to principles of intimacy and autonomy is not a simple task. One must weigh, balance, and analyze each factor. Courts addressing personal curtilage should also have the flexibility to weigh the different factors. In this way, courts may define a space consistent with the existing Fourth Amendment norms and principles.

The theory of personal curtilage is an innovation, but not an easy solution to easing the ongoing tensions between security and liberty in the Fourth Amendment doctrine. It offers a new and more protective framework for analysis.420 It addresses the growing

419. See supra Part II.A.
420. Cf. Christopher Slobogin, Technologically-Assisted Physical Surveillance: The
problem of technological change—a problem the Supreme Court Justices themselves know to be an issue. It offers a theoretical framework that focuses on security, personal responsibility, and the preservation of intimate information as a more promising basis from which to analyze the Fourth Amendment in public. Like the legal fiction of traditional curtilage, it recognizes that the law must evolve to create buffer spaces where people can be secure from government technologies.

American Bar Association’s Tentative Draft Standards, 10 HARV. J.L. & TECH. 383, 386-87 (1997) (explaining courts’ slow adaptation to modern-day technology and the ABA helping to provide newer standards that balance law enforcement and privacy).

421. See Debra Cassens Weiss, Kagan Sees Privacy as One of Most Important Future Issues for Court, ABA JOURNAL (Dec. 17, 2012, 9:45 AM), http://www.abajournal.com/news/article/kagan_sees_privacy_as_one_of_most_important_future_issues_for_court/ (noting Kagan as citing the concerns of Louis Brandeis who “understood how new technologies interfere with privacy, which I think will be one of the most important issues before the court in the decades to come”).