

THE FOURTH AMENDMENT, PRIVACY AND ADVANCING TECHNOLOGY

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A technological breakthrough in techniques of physical surveillance now makes it possible for government agents and private persons to penetrate the privacy of homes, offices, and vehicles; to survey individuals moving about in public places; and to monitor the basic channels of communication by telephone, telegraph, radio, television, and data line. Most of the 'hardware' for this physical surveillance is cheap, readily available to the general public, relatively easy to install, and not presently illegal to own.¹

Following the American Revolution, when the new Americans demanded that the proposed constitution be amended to provide written guarantees against "unreasonable searches and seizures,"² they were motivated by a pattern of abuses during the colonial period. British colonial authorities had used writs of assistance that allowed them to do no more than specify the object of a search, and thereby obtain a warrant allowing them to search any place where the goods might be found,³

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¹ ALAN F. WESTIN, *PRIVACY AND FREEDOM*, 365-66 (1967).

² The Fourth Amendment provides as follows:

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

U.S. CONST. amend. IV.

³ See *Atwater v. City of Lago Vista*, 532 U.S. 318, 339-40 (2001) (noting that "the Framers or proponents of the Fourth Amendment, [were] outspokenly opposed to the infamous general warrants and writs of assistance . . ."); *Samson v. California*, 547 U.S. 843, 858 (2006) ("The pre-Revolutionary 'writs of assistance,' which permitted

without limit as to place or duration.⁴ Colonial officials had also used “general warrants” that required them only to specify an offense, and then left it to the discretion of executing officials to decide which persons should be arrested and which places should be searched.⁵ These British practices stirred up such a high level of anger among the colonists that it rapidly became clear that the proposed constitution would not be ratified without explicit protections against similar abuses (as well as in

roving searches for contraband, were reviled precisely because they ‘placed the liberty of every man in the hands of every petty officer.’” (quoting *Boyd v. United States*, 116 U.S. 616, 625 (1886)); *Virginia v. Moore*, 553 U.S. 164, 168-69 (2008) (“The immediate object of the Fourth Amendment was to prohibit the general warrants and writs of assistance that English judges had employed against the colonists.”); *see also* RUSSELL L. WEAVER, LESLIE W. ABRAMSON, JOHN M. BURKOFF & CATHERINE HANCOCK, *PRINCIPLES OF CRIMINAL PROCEDURE* 64 (3d ed. 2008).

⁴ *See Steagald v. United States*, 451 U.S. 204, 220 (1981) (“[T]he writs of assistance used in the Colonies noted only the object of the search—any uncustomed goods—and thus left customs officials completely free to search any place where they believed such goods might be.”); *Gilbert v. California*, 388 U.S. 263, 286 (1967) (“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.’”) (quoting *Boyd v. United States*, 116 U.S. 616, 625 (1886)).

⁵ *See Virginia v. Moore*, 553 U.S. 164, 168-69 (2008) (“The immediate object of the Fourth Amendment was to prohibit the general warrants and writs of assistance that English judges had employed against the colonists.”); *Steagald v. United States*, 451 U.S. 204, 220 (1981) (“While the common law thus sheds relatively little light on the narrow question before us, the history of the Fourth Amendment strongly suggests that its Framers would not have sanctioned the instant search. The Fourth Amendment was intended partly to protect against the abuses of the general warrants that had occurred in England and of the writs of assistance used in the Colonies.”); *Payton v. New York*, 445 U.S. 573, 608 (1980) (“In fact, it was the abusive use of the warrant power, rather than any excessive zeal in the discharge of peace officers’ inherent authority, that precipitated the Fourth Amendment. That Amendment grew out of colonial opposition to the infamous general warrants known as writs of assistance, which empowered customs officers to search at will, and to break open receptacles or packages, wherever they suspected uncustomed goods to be.”); *see Marshall v. Barlow’s, Inc.*, 436 U.S. 307, 311 (1978) (“The general warrant was a recurring point of contention in the Colonies immediately preceding the Revolution. The particular offensiveness it engendered was acutely felt by the merchants and businessmen whose premises and products were inspected for compliance with the several parliamentary revenue measures that most irritated the colonists.”).

protection of various other rights).⁶ The demands culminated in the Bill of Rights, which provided protections for various rights, including the Fourth Amendment's prohibition against "unreasonable searches and seizures."⁷

The Framers of the Fourth Amendment could not have envisioned the extent to which technology would reshape society in the following centuries. Today, the effects of technology can be seen everywhere from health care (where technology allows doctors to treat patients located at distant places⁸), to telecommunications (where people can use systems like Skype to communicate cheaply over long distances at low cost⁹), and the changes have been revolutionary. For example, the communications industry, which was once dominated and controlled by large media corporations that possessed the money to purchase and operate printing presses or radio and television stations,¹⁰ has seen its power and influence eroded by the development of

⁶ See *Maryland v. Garrison*, 480 U.S. 79, 910 (1987) ("The Fourth Amendment, in fact, was a direct response to the colonists' objection to searches of homes under general warrants or without warrants."); see *Marshall v. Barlow's, Inc.*, 436 U.S. 307, 311 (1978) ("[T]he Fourth Amendment's commands grew in large measure out of the colonists' experience with the writs of assistance . . . [that] granted sweeping power to customs officials and other agents of the King to search at large for smuggled goods." (quoting *United States v. Chadwick*, 433 U.S. 1, 7-8 (1977)); *Boyd v. United States*, 116 U.S. 616, 625 (1886) ("[T]he famous debate [and the anger] in which it occurred was perhaps the most prominent event which inaugurated the resistance of the colonies to the oppressions of the mother country. . . . These things . . . were fresh in the memories of those who achieved our independence and established our form of government."); see also *United States v. Verdugo-Urquidez*, 494 U.S. 259, 266 (1990) ("The driving force behind the adoption of the [Fourth] Amendment . . . was widespread hostility among the former colonists to the issuance of writs of assistance. . . . [T]he purpose of the Fourth Amendment was to protect the people of the United States against arbitrary action by their own Government . . .").

⁷ U.S. CONST. amend. IV.

⁸ See Laura Sydell, *Healing Rural Patients with a Dose of Broadband*, Nat'l Public Radio (Aug. 17, 2010), <http://www.npr.org/templates/story/story.php?storyId=129178899>.

⁹ See *Morning Edition: Skype Has Big Piece of International Calling Pie*, Nat'l Public Radio (Jan. 20, 2010), <http://www.npr.org/templates/story/story.php?storyId=122755197>.

¹⁰ See generally RUSSELL L. WEAVER, FROM GUTENBURG TO THE INTERNET: FREE SPEECH, ADVANCING TECHNOLOGY AND THE IMPLICATIONS FOR DEMOCRACY (forthcoming 2011).

personal computers (PCs), as well as the Internet.¹¹ Using Internet-based devices like listservs, blogs, Facebook, MySpace, Twitter and other communications technologies, ordinary people have been empowered to directly communicate with each other.¹² This revolution in speech technology has allowed ordinary people to shape and influence the political process, with far less censorship from media conglomerates.¹³ Of course, the Internet has also released destructive forces in the sense that new speech technologies have also empowered various types of criminal conduct, including the distribution of child pornography,¹⁴ sexual predation and child abuse,¹⁵ and fraudulent schemes. The Internet has also been used by extremist groups to propagate hate speech¹⁶ and Holocaust denial,¹⁷ and has provided a haven for terrorists.¹⁸

Technological developments have also reshaped police surveillance techniques and created major doctrinal difficulties for courts in applying the Fourth Amendment. At the founding of the nation, police and other governmental agents did not have sophisticated spying and surveillance technologies at their disposal. Governmental agents might have tried to eavesdrop on their fellow citizens in taverns or other public settings, and might even have tried to listen outside of a suspect's

¹¹ *See id.*

¹² *See id.*

¹³ *See id.*

¹⁴ *See* Ashcroft v. Free Speech Coal., 535 U.S. 234 (2002) (striking down portions of the Child Pornography Prevention Act of 1996 that prohibited "virtual" child pornography); *Ferber v. New York*, 458 U.S. 747 (1982) (upholding a New York criminal statute that prohibited individuals from knowingly promoting sexual performances by children under the age of sixteen years old).

¹⁵ *See* Trymaine Lee, *Bill Would Bar Sex Offenders from Facebook and MySpace*, N.Y. TIMES, Jan. 30, 2008, at B4.

¹⁶ *See* Russell L. Weaver, Nicholas Delpierre & Laurence Boissier, *Holocaust Denial and Governmentally Declared "Truth": French and American Perspectives*, 41 TEX. TECH L. REV. 495 (2009).

¹⁷ *See* RICHARD E. HARWOOD, DID SIX MILLION REALLY DIE? (1974), available at <http://www.ihr.org/books/harwood/dsmrd01.html>; *see also* Raffi Berg, *The Fight Against Holocaust Denial*, BBC NEWS, Apr. 14, 2005, available at <http://news.bbc.co.uk/1/hi/world/europe/4436275.stm>.

¹⁸ *See* Russell L. Weaver, *Brandenburg & Incitement in a Digital Era*, 80 MISS. L.J. (forthcoming Mar. 2011).

window. However, without technology, the opportunities for successful eavesdropping were more limited. Today, eavesdropping and other surveillance technologies have gone high tech and created Orwellian possibilities for snooping.¹⁹ As one commentator noted in 1974, “rapid technological advances and the consequent recognition of the ‘frightening paraphernalia which the vaunted marvels of an electronic age may visit upon human society’ have underlined the possibility of worse horrors yet to come.”²⁰

These potential “horrors” can be seen in the various surveillance technologies now available to the government. For example, the police can plant microphones in offices that allow them to overhear conversations from distant locations,²¹ use devices that allow them to overhear conversations through walls,²² and use super-sensitive microphones that allow them to overhear conversations through remotely placed technology.²³ Police can also utilize forward-looking infrared (FLIR) to monitor the amount of heat emanating from houses,²⁴ maintain closed-circuit television systems that allow them to continuously surveil public places,²⁵ use technology to detect speeding motorists (and send tickets to the speeders’ homes),²⁶ use global positioning systems (GPS) that allow them to continuously

¹⁹ See GEORGE ORWELL, 1984 (1949).

²⁰ Anthony G. Amsterdam, *Perspectives on the Fourth Amendment*, 58 MINN. L. REV. 349, 386 (1974).

²¹ See *Katz v. United States*, 389 U.S. 347, 348-49 (1967) (involving the attachment of an electronic listening device to the outside of a phone booth so that the police could overhear what was being said inside the phone booth).

²² See *Goldman v. United States*, 316 U.S. 129, 131-32 (1942) (involving the use of a listening device that allowed the police to overhear what was being said in Goldman’s office even though the police were located in an adjoining office).

²³ See *Silverman v. United States*, 365 U.S. 505, 506, 508-09 (1961) (discussing the fact that advanced surveillance technologies were already available in the 1960s).

²⁴ See *Kyllo v. United States*, 533 U.S. 27 (2001).

²⁵ See Dina Temple-Raston & Robert Smith, *Weekend Edition Sunday: U.S. Eyes U.K.’s Surveillance Cameras*, Nat’l Public Radio (July 8, 2007), <http://www.npr.org/templates/story/story.php?storyId=11813693>.

²⁶ See Ted Robbins, *Morning Edition: Intense Backlash Against Arizona Speed Cameras*, Nat’l Public Radio (Feb. 17, 2010), <http://www.npr.org/templates/story/story.php?storyId=123501023>.

monitor the location of individuals and things,²⁷ and have devices that allow them to overhear cell and cordless telephone conversations.²⁸ There is also X-ray technology that would allow police to peer through walls and into the privacy of homes using drive-by x-ray vans.²⁹ Moreover, as PCs and the Internet have come into common usage, devices now exist that permit the monitoring of key strokes and other computer uses,³⁰ and that allow one person to invade the privacy of a person's home and data from distant cyber sources through spyware technology.³¹ As with listening devices, many of these devices can be purchased and used by ordinary individuals to spy on the movement of others³² and to monitor what their neighbors or others are saying,³³ even from some distance away.³⁴

The steady onslaught of technology has raised troubling implications for individual privacy. While various federal and

²⁷ See *City of Ontario v. Quon*, 130 S. Ct. 2610 (2010); *Devega v. State*, 689 S.E.2d 293 (Ga. 2010).

²⁸ See *People v. Ledesma*, 795 N.E.2d 253, 260-61 (Ill. 2003) (discussing a private individual's interception of a telephone conversation); Kimberly R. Thompson, *Cell Phone Snooping: Why Electronic Eavesdropping Goes Unpunished*, 35 AM. CRIM. L. REV. 137, 143-44 (1997).

²⁹ See Andy Greenberg, *Scanner Vans Allow Drive-By Snooping*, FORBES, (Sept. 27, 2010), available at <http://www.forbes.com/forbes/2010/0927/technology-x-rays-homeland-security-aclu-drive-by-snooping.html>; see also Rania M. Basha, *Kyllo v. United States: The Fourth Amendment Triumphs Over Technology*, 41 BRANDEIS L.J. 939, 939 (2003).

³⁰ See USA Spy Shop, *Spy Software and Key Loggers*, <http://www.usaspyshop.com/spy-software-c-55.html> (last visited Dec. 20, 2010) (listing computer spyware devices for sale).

³¹ See Alan F. Blakley, Daniel B. Garrie & Matthew J. Armstrong, *Coddling Spies: Why the Law Doesn't Adequately Address Computer Spyware*, 25 DUKE L. & TECH. REV. 1 (2005), <http://www.law.duke.edu/journals/dltr/articles/2005dltr0025.html>; Jason Broberg, *From Calea to Carnivore: How Uncle Sam Conscripted Private Industry in Order to Wiretap Digital Telecommunications*, 77 N.D. L. REV. 795 (2001); Jayni Foley, *Are Google Searches Private? An Originalist Interpretation of the Fourth Amendment in Online Communication Cases*, 22 BERKELEY TECH. L.J. 447 (2007).

³² See USA Spy Shop, *GPS Tracking Devices*, <http://www.usaspyshop.com/gps-tracking-devices-c-118.html> (last visited Dec. 20, 2010) (listing GPS systems for sale).

³³ See The Spy Zone, *Listening Devices*, <http://www.spyzone.com/ccp0-display/listeningdevices.html> (last visited Dec. 20, 2010).

³⁴ See Spy Shop, *Super Ear / Sound Amplifier System*, <http://www.usaspyshop.com/sound-amplifier-system-p-472.html> (last visited Dec. 20, 2010) (listing listening devices for sale).

state laws might be used to maintain and protect privacy, including anti-hacking³⁵ and anti-wiretapping laws,³⁶ an important bulwark against the government and the police has always been the Fourth Amendment to the United States Constitution.³⁷ While the Fourth Amendment has been interpreted to provide citizens with some protection against modern technologies,³⁸ early United States Supreme Court decisions dealing with technology and the Fourth Amendment tended to adhere to more traditional views of the Fourth Amendment and were virtually unresponsive (except in the dissents) to the problems presented by new technologies.³⁹ The Court's landmark decision in *Katz v. United States*⁴⁰ shifted the debate and attempted to come to grips with technology. And, indeed, the *Katz* decision was revolutionary in the sense that it cleanly broke from precedent and laid down a new approach for dealing with technological issues. While the *Katz* decision was perhaps not as significant as the Court's free speech decision in *New York Times Co. v. Sullivan*,⁴¹ which one commentator viewed as "thrilling"⁴² and another viewed as "an occasion for dancing in the streets,"⁴³ it has been recognized as a "seminal" deci-

³⁵ See Mary M. Calkins, *They Shoot Trojan Horses, Don't They? An Economic Analysis of Anti-Hacking Regulatory Models*, 89 GEO. L.J. 171, 189 (2000).

³⁶ See Patricia L. Bellia, *Spyware and the Limits of Surveillance Law*, 20 BERKELEY TECH. L.J. 1283, 1289-90 (2005).

³⁷ U.S. CONST. amend. IV.

³⁸ See *Kyllo v. United States*, 533 U.S. 27, 34-35 (2001) (holding that the police may not use FLIR technology to ascertain the amount of heat emanating from a house (in order to determine whether the occupant was using special lights to grow marijuana in the attic) without a warrant); *Katz v. United States*, 389 U.S. 347, 353 (1967) (holding that the police committed a "search" within the meaning of the Fourth Amendment when they attached a listening device to the outside of a phone booth in order to overhear and record the contents of Katz's telephone conversation).

³⁹ See, e.g., *Goldman v. United States*, 316 U.S. 129 (1942); *Olmstead v. United States*, 277 U.S. 438 (1928); *Ex parte Jackson*, 96 U.S. 727 (1877).

⁴⁰ 389 U.S. 347 (1967).

⁴¹ 376 U.S. 254 (1964).

⁴² Anthony Lewis, *New York Times v. Sullivan Reconsidered: Time to Return to "The Central Meaning of the First Amendment,"* 83 COLUM. L. REV. 603, 625 (1983).

⁴³ Harry J. Kalven, Jr., *The New York Times Case: A Note on "The Central Meaning of the First Amendment,"* 1964 SUP. CT. REV. 191, 221 n.125 (quoting Alexander Meiklejohn).

sion.⁴⁴ Moreover, *Katz* offered substantial hope to those who were concerned about the advance of technology and the potential implications for privacy. However, *Katz* has not lived up to that promise for a variety of reasons, including the fact that the *Katz* test has been narrowly construed and has not easily adapted to new technologies.⁴⁵ This article examines the United States Supreme Court's handling of technology issues under the Fourth Amendment and the difficulties that the Court has encountered in trying to cope with the steady onslaught of technology.

I. PRE-*KATZ* JURISPRUDENCE REGARDING TECHNOLOGY AND THE FOURTH AMENDMENT

As noted, when the Fourth Amendment was drafted and ratified, the state of surveillance technology was relatively crude and simplistic, and the ability of the government to pry into the lives of private citizens was much more circumscribed. As a result, the new Americans were focused on abuses committed by the British in using writs of assistance and general warrants, and they could hardly have envisioned the surveillance technologies that would be developed later. Since the new Americans were familiar with actual physical searches by British officials of their homes and persons, one would have expected them to define the term "search" in the way that it might have been defined then in ordinary parlance: a search would have involved an actual physical search of a particular place or person.⁴⁶

For many years, the United States Supreme Court's definition of the term "search" tended to track common understandings.⁴⁷ As a result, most early Fourth Amendment deci-

⁴⁴ See Amsterdam, *supra* note 20, at 383 ("[*Katz*] is, of course, now generally recognized as seminal and has rapidly become the basis of a new formula of fourth amendment coverage.").

⁴⁵ See Timothy Casey, *Electronic Surveillance and the Right to Be Secure*, 41 U.C. DAVIS L. REV. 977 (2008).

⁴⁶ See *Draper v. United States*, 358 U.S. 307 (1959).

⁴⁷ See, e.g., *Carroll v. United States*, 267 U.S. 132 (1925); *Hester v. United States*, 265 U.S. 57, 59 (1924) (concluding that "the special protection accorded by the Fourth

sions adopted a historical definition of the term “search” by focusing on people and places. If a person was searched, then the Fourth Amendment was implicated.⁴⁸ If a place was searched, the question was whether the government had intruded or trespassed into a “constitutionally protected area.”⁴⁹ Thus, when the police broke into someone’s house (a “constitutionally protected area”) and rummaged through its contents, the Court had no difficulty concluding that the police had carried out a Fourth Amendment “search.”⁵⁰ Likewise, when the police made an unauthorized entry into a car (once automobiles came into existence) to rummage through the trunk or seized an individual’s briefcase to review its contents, the courts would likewise find that the police had conducted a search.⁵¹

Not until the early part of the twentieth century was the Court forced to consider the ramifications of modern technology and to think about whether the development of new technologies required a modification of the Court’s definition of the term “search.” In the cases that arose at that time, the Court tended to revert to the ideas that had (by that time) governed Fourth Amendment jurisprudence for nearly a century and a half. In other words, in deciding whether governmental officials had conducted a search, within the meaning of the Fourth Amendment, the Court focused on whether police or governmental officials had physically searched a person or had intruded or trespassed into a constitutionally protected area. However, in these early cases, there was an active debate between the Justices of the United States Supreme Court about whether the Court should adhere to its historical approach, or whether advances in technology demanded a new and different approach.

Amendment to the people in their ‘persons, houses, papers and effects,’ is not extended to the open fields”).

⁴⁸ See *Draper*, 358 U.S. 307 (1959).

⁴⁹ See, e.g., *Goldman v. United States*, 316 U.S. 129 (1942); *Olmstead v. United States*, 277 U.S. 438 (1928); *Ex parte Jackson*, 96 U. S. 727 (1877); see also *Amsterdam*, *supra* note 20, at 381.

⁵⁰ See *Silverman v. United States*, 365 U.S. 505, 511-12 (1961).

⁵¹ See, e.g., *Carroll*, 267 U.S. 132 (1925).

Illustrative of the Court's early technology holdings was the decision in *Olmstead v. United States*.⁵² *Olmstead* involved an illegal conspiracy to buy and sell liquor, and evidence obtained through wiretaps about liquor orders by customers and acceptance of those orders. The wiretaps had been accomplished by attaching small wires alongside ordinary telephone wires outside of the residences of four of the suspects, as well as on the telephone line leading from their primary office.⁵³ In installing the wiretaps, governmental agents did not trespass on defendants' properties, but instead installed the taps in the basement of a large office building and on wires located in the streets outside of defendants' residences.⁵⁴

In deciding the case, the *Olmstead* Court relied on its prior holding in *Carroll v. United States*,⁵⁵ and declared that the Fourth Amendment must be "construed in the light of what was deemed an unreasonable search and seizure when it [the Fourth Amendment] was adopted."⁵⁶ In the Court's view, the "well-known historical purpose of the Fourth Amendment" was to end general warrants and writs of assistance and "to prevent the use of governmental force to search a man's house, his person, his papers, and his effects, and to prevent their seizure against his will."⁵⁷ As a result, in the Court's view, the focus was on "material things—the person, the house, his papers, or his effects,"⁵⁸ and therefore on whether there had been a "trespass" or an intrusion into a "constitutionally protected area." In light of this history, the Court held that the wiretaps did not involve a prohibited invasion of *Olmstead*'s property or office.⁵⁹ Since the phone lines were used by defendants to project their voices outside of their homes and offices, and the police re-

⁵² 277 U.S. 438 (1928).

⁵³ *Id.* at 457.

⁵⁴ *Id.*

⁵⁵ 267 U.S. 132, 149 (1925).

⁵⁶ *Olmstead*, 277 U.S. at 465 (quoting *Carroll*, 267 U.S. at 149).

⁵⁷ *Id.* at 463.

⁵⁸ *Id.* at 464.

⁵⁹ *Id.* at 465 ("The language of the amendment cannot 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, any more than are the highways along which they are stretched.")

mained outside of those areas, the Court found no constitutionally prohibited intrusion.⁶⁰ In reaching those conclusions, the Court reverted to property principles,⁶¹ and held that the intrusions were insufficient to have constitutional implications.⁶² Finding no search within the meaning of the Fourth Amendment, the Court was not required to decide whether constitutionally required procedures had been satisfied.

Even in *Olmstead*, a few Justices were beginning to realize that the onslaught of technology might create substantial doctrinal difficulties for the Court's Fourth Amendment jurisprudence and were beginning to argue that the Court should adjust its approach to account for the encroaching effects of technology. Justice Brandeis, in particular, grasped the potentially adverse implications of technological innovation for personal privacy and argued that the Fourth Amendment should be given a broader interpretation in light of technological advances. Brandeis, relying on *McCulloch v. Maryland*⁶³ argued that, "[i]n the application of a constitution . . . our contemplation cannot be only of what has been, but of what may be."⁶⁴ With some prescience, Brandeis noted that advances in technology could have a significant adverse effect on personal privacy: the "progress of science in furnishing the government with means of espionage is not likely to stop with wire tapping," and "[w]ays may some day be developed by which the government, without removing papers from secret drawers, can reproduce

⁶⁰ *Id.* at 466 ("The reasonable view is that one who installs in his house a telephone instrument with connecting wires intends to project his voice to those quite outside, and that the wires beyond his house, and messages while passing over them, are not within the protection of the Fourth Amendment. Here those who intercepted the projected voices were not in the house of either party to the conversation.").

⁶¹ *Id.* ("Neither the cases we have cited nor any of the many federal decisions brought to our attention hold the Fourth Amendment to have been violated as against a defendant, unless there has been an official search and seizure of his person or such a seizure of his papers or his tangible material effects or an actual physical invasion of his house 'or curtilage' for the purpose of making a seizure.").

⁶² *Id.* ("We think, therefore, that the wire tapping here disclosed did not amount to a search or seizure within the meaning of the Fourth Amendment.").

⁶³ 17 U.S. (4 Wheat.) 316 (1819) ("[W]e must never forget that it is a Constitution we are expounding.").

⁶⁴ *Olmstead*, 277 U.S. at 474 (Brandeis, J., dissenting) (quoting *Weems v. United States*, 217 U.S. 349, 373 (1910)).

them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home.”⁶⁵ He also expressed fear regarding the implications of advancing technology for personal freedom.⁶⁶ Based on these concerns, Justice Brandeis inquired, “Can it be that the Constitution affords no protection against such invasions of individual security?”⁶⁷

Because of his concerns, Justice Brandeis tried to shift the Court’s focus from constitutionally protected places to considerations of personal privacy. Relying on *Boyd v. United States*,⁶⁸ he argued that: “It is not the breaking of his doors, and the rummaging of his drawers, that constitutes the essence of the offense; but it is the invasion of his indefeasible right of personal security, personal liberty and private property”⁶⁹ Brandeis also relied on the Court’s holding in *Ex parte Jackson*,⁷⁰ which involved a sealed letter that had been sent through the U.S. mail and then opened by law enforcement officials. Brandeis saw no critical distinction between protecting a letter entrusted to the postal service and protecting a phone call made over phone lines: “True, the one is visible, the other invisible; the one is tangible, the other intangible; the one is sealed, and the other unsealed; but these are distinctions without a difference.”⁷¹ Indeed, he argued that the invasion of privacy was greater when the police used wiretapping to overhear a conversation:

The evil incident to invasion of the privacy of the telephone is far greater than that involved in tampering with the mails. Whenever a telephone line is tapped, the privacy of the per-

⁶⁵ *Id.*

⁶⁶ *Id.* (Brandeis stated a fear that “[a]dvances in the psychic and related sciences may bring means of exploring unexpressed beliefs, thoughts and emotions. That places the liberty of every man in the hands of every petty officer.” (quoting James Otis, In Opposition to Writs of Assistance, 5 (Feb. 1761)).

⁶⁷ *Id.*

⁶⁸ 116 U.S. 616, 627-30 (1886).

⁶⁹ *Olmstead*, 277 U.S. at 474-75 (Brandeis, J., dissenting) (quoting *Boyd*, 116 U.S. at 630).

⁷⁰ 96 U.S. 727 (1877).

⁷¹ *Olmstead*, 277 U.S. at 475 (Brandeis, J., dissenting) (quoting the lower court, *Olmstead v. United States*, 19 F.2d 842, 850 (9th Cir. 1927)).

sons at both ends of the line is invaded, and all conversations between them upon any subject, and although proper, confidential, and privileged, may be overheard. Moreover, the tapping of one man's telephone line involves the tapping of the telephone of every other person whom he may call, or who may call him. As a means of espionage, writs of assistance and general warrants are but puny instruments of tyranny and oppression when compared with wire tapping.⁷²

For Brandeis, in reading the letter and in conducting the wiretap, the government had gone too far in examining the contents of communications.⁷³ Justice Butler also dissented in *Olmstead* and also argued for a more expansive interpretation of the Fourth Amendment. He noted that private telephones are used for many important purposes, and that the contracts between telephone companies and their customers contemplate private usage.⁷⁴ Since “communications belong to the parties between whom they pass,” and “the exclusive use of the wire belongs to the persons served by it,”⁷⁵ he viewed wiretapping as a search within the meaning of the Fourth Amendment.⁷⁶ In

⁷² *Id.*

⁷³ *Id.* at 477-78.

Decisions of this court applying the principle of the *Boyd* Case have settled these things. Unjustified search and seizure violates the Fourth Amendment, whatever the character of the paper; whether the paper when taken by the federal officers was in the home, in an office, or elsewhere; whether the taking was effected by force, by fraud, or in the orderly process of a court's procedure. From these decisions, it follows necessarily that the amendment is violated by the officer's reading the paper without a physical seizure, without his even touching it, and that use, in any criminal proceeding, of the contents of the paper so examined—as where they are testified to by a federal officer who thus saw the document or where, through knowledge so obtained, a copy has been procured elsewhere—any such use constitutes a violation of the Fifth Amendment.

Id.

⁷⁴ *Id.* at 487 (Butler, J., dissenting) (“Telephones are used generally for transmission of messages concerning official, social, business and personal affairs including communications that are private and privileged—those between physician and patient, lawyer and client, parent and child, husband and wife.”).

⁷⁵ *Id.*

⁷⁶ *Id.* (“Wire tapping involves interference with the wire while being used. Tapping the wires and listening in by the officers literally constituted a search for evidence. As the communications passed, they were heard and taken down.”).

his view, the Court “has always construed the Constitution in the light of the principles upon which it was founded,”⁷⁷ and “the Fourth Amendment safeguards against all evils that are like and equivalent to those embraced within the ordinary meaning of its words.”⁷⁸ In other words, the monitoring of telephone lines was equivalent to colonial officials rummaging through a house.

Similar fault lines were evident in the Court’s decision in *Goldman v. United States*.⁷⁹ In that case, which followed *Olmstead*, defendants were charged with conspiracy to violate criminal provisions of the Bankruptcy Act. In the process of gathering evidence against petitioners, two federal agents surreptitiously gained access to Shulman’s office (he was one of the defendants) with the assistance of the building superintendent.⁸⁰ They also managed to access the adjoining office where they installed a listening apparatus in a small aperture in the partition wall.⁸¹ By means of the listening apparatus, the police hoped to overhear a meeting between Goldman and others set for the following afternoon.⁸² When the apparatus did not work, the police decided to use a “detectaphone” to eavesdrop on the meeting.⁸³ The detectaphone, which was a delicate device that could be placed against the wall, had the capacity to detect sound waves from the next office and could amplify those waves so that they could be heard and understood in the next room. In other words, the device allowed police to eavesdrop on the meeting without actually entering the room. The police also used the device on later occasions to overhear other conversations in the adjoining office.⁸⁴ Using a stenographer, the police recorded and transcribed the conversations and sought to use them as evidence against Goldman.⁸⁵

⁷⁷ *Id.* at 487-88.

⁷⁸ *Id.* at 488.

⁷⁹ 316 U.S. 129 (1942).

⁸⁰ *Id.* at 131.

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.* at 131-32.

⁸⁵ *Id.*

Applying the same analysis that it had used in *Olmstead*, the Court held that the government's use of the detectaphone did not violate the Fourth Amendment. Although the police had trespassed into Goldman's office, the trespass occurred during the installation of a listening apparatus that was not used to overhear Goldman's conversations.⁸⁶ Instead, the spying had been accomplished by means of the detectaphone, which allowed the police to remain outside of Goldman's office but nevertheless to overhear the conversations without trespassing into or even entering the office. Because there was no trespass, the Court held that the Fourth Amendment was inapplicable even though the suspect spoke in his own office, and therefore, had an expectation of privacy regarding the contents of his conversations.⁸⁷

A dissenting Justice Murphy argued for a more expansive interpretation of the Fourth Amendment, encouraged the Court to reconsider its approach to technological issues, and argued that police use of the detectaphone was a search within the meaning of the Fourth Amendment.⁸⁸ Relying on Justice Brandeis and Samuel Warren's seminal article on privacy,⁸⁹ he argued that the Fourth Amendment should be interpreted broadly to protect "the individual against unwarranted intrusions by

⁸⁶ *Id.* at 134-35.

⁸⁷ *Id.* at 135.

The suggested ground of distinction is that the *Olmstead* case dealt with the tapping of telephone wires, and the court adverted to the fact that, in using a telephone, the speaker projects his voice beyond the confines of his home or office and, therefore, assumes the risk that his message may be intercepted. It is urged that where, as in the present case, one talks in his own office, and intends his conversation to be confined within the four walls of the room, he does not intend his voice shall go beyond those walls and it is not to be assumed he takes the risk of someone's use of a delicate detector in the next room. We think, however, the distinction is too nice for practical application of the Constitutional guarantee and no reasonable or logical distinction can be drawn between what federal agents did in the present case and state officers did in the *Olmstead* case.

Id.

⁸⁸ *Id.* at 136-38 (Murphy, J., dissenting).

⁸⁹ Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 198-99 (1890).

others into his private affairs.”⁹⁰ While Justice Murphy recognized that the literal language of the Fourth Amendment seemed to require a trespassory invasion, as a predicate to a finding of a search, and therefore might be construed as providing no protection to Goldman, he argued that “it has not been the rule or practice of this Court to permit the scope and operation of broad principles ordained by the Constitution to be restricted, by a literal reading of its provisions, to those evils and phenomena that were contemporary with its framing.”⁹¹ Noting that the “conditions of modern life have greatly expanded the range and character of those activities which require protection from intrusive action by Government officials if men and women are to enjoy the full benefit of that privacy which the Fourth Amendment was intended to provide,” it is the Court’s “duty to see that this historic provision receives a construction sufficiently liberal and elastic to make it serve the needs and manners of each succeeding generation.”⁹²

For Justice Murphy, it mattered not that there had been no physical entry into Goldman’s office since “science has brought forth far more effective devices for the invasion of a person’s privacy than the direct and obvious methods of oppression which were detested by our forebears and which inspired the Fourth Amendment.”⁹³ He argued that the Framers would have abhorred these new devices because they allowed governmental officials to invade privacy and intrude on intimate details, in various ways, “by placing on the outer walls of the sanctum a detectaphone that transmits to the outside listener the intimate details of a private conversation, or by new methods of photography that penetrate walls or overcome distances”⁹⁴ In addition, Justice Murphy regarded *Olmstead*

⁹⁰ *Goldman*, 316 U.S. at 136 (Murphy, J., dissenting) (“But the Fourth Amendment puts a restraint on the arm of the Government itself and prevents it from invading the sanctity of a man’s home or his private quarters in a chase for a suspect except under safeguards calculated to prevent oppression and abuse of authority.”).

⁹¹ *Id.* at 138.

⁹² *Id.*

⁹³ *Id.* at 139.

⁹⁴ *Id.* at 139-40. He went on to argue that:

as an aberration in the sense that prior decisions of the Court had “insisted on a liberal construction of the Fourth Amendment and placed within its compass activities bearing slight, if any, resemblance to the mischiefs known at the time of its adoption.”⁹⁵ Justice Murphy also argued that *Olmstead* was distinguishable because Goldman and his co-conspirators did not intend to project their conversations beyond the walls of a private office, and therefore the use of the detectaphone constituted “a direct invasion of the privacy of the occupant, and a search of his private quarters.”⁹⁶ He went on to argue that a free society must protect such communications against governmental surveillance.⁹⁷

Olmstead and *Goldman* were followed by the holding in *Silverman v. United States*.⁹⁸ By the time that *Silverman* was decided, the Court was becoming acutely aware of the intrusive nature of new technologies. Indeed, in the briefs in that case, the parties had discussed devices such as “the parabolic microphone which can pick up a conversation three hundred yards away,” experimental sound wave technology “whereby a room

Such invasions of privacy, unless they are authorized by a warrant issued in the manner and form prescribed by the Amendment or otherwise conducted under adequate safeguards defined by statute, are at one with the evils which have heretofore been held to be within the Fourth Amendment and equally call for remedial action.

Id. at 140.

⁹⁵ *Id.* at 141 n.8.

⁹⁶ *Id.* at 141.

⁹⁷ *Id.* at 142.

The benefits that accrue from this and other articles of the Bill of Rights are characteristic of democratic rule. They are among the amenities that distinguish a free society from one in which the rights and comforts of the individual are wholly subordinated to the interests of the state. We cherish and uphold them as necessary and salutary checks on the authority of government. They provide a standard of official conduct which the courts must enforce. At a time when the nation is called upon to give freely of life and treasure to defend and preserve the institutions of democracy and freedom, we should not permit any of the essentials of freedom to lose vitality through legal interpretations surveillance that are restrictive and inadequate for the period in which we live.

Id.

⁹⁸ 365 U.S. 505 (1961).

is flooded with a certain type of sonic wave . . . mak[ing] it possible to overhear everything said in a room without ever entering it or even going near it,” and an instrument “which can pick up a conversation through an open office window on the opposite side of a busy street.”⁹⁹ However, the Court was able to sidestep a reexamination of *Olmstead* and *Goldman* by distinguishing those cases.

In *Silverman*, petitioners were convicted of gambling offenses based on their conversations that police overheard via an electronic listening device. The listening device was a so-called “spike mike” which included a microphone with a foot-long spike, an amplifier, a power pack, and earphones. Police officers inserted the spike under a baseboard in a second-floor room of the vacant house and into a crevice extending several inches into the party wall, until the spike hit something solid “that acted as a very good sounding board.”¹⁰⁰ The record showed that the spike actually made contact with a heating duct in petitioners’ house, and that the heating system served as a conductor of sound, allowing the police to overhear conversations on both floors of the house through the earphones. The officers used evidence obtained from the spike mike to obtain a search warrant from which they were able to obtain additional evidence.¹⁰¹

In distinguishing *Olmstead* and *Goldman*, the Court emphasized that the spike mike intruded into Silverman’s home and created what the Court referred to as “an unauthorized physical penetration into the premises occupied by the petitioners.”¹⁰² Since the mike connected to the heating duct, it became “in effect a giant microphone, running through the entire house.”¹⁰³ Given that there was a physical invasion of the premises, the Court regarded the case differently than *Goldman* (where the detectaphone had simply been held up against a

⁹⁹ *Id.* at 508-09.

¹⁰⁰ *Id.* at 506.

¹⁰¹ *Id.* at 507 n.1.

¹⁰² *Id.*

¹⁰³ *Id.*

wall)¹⁰⁴ and *Olmstead* (where there had been no physical trespass to the premises).¹⁰⁵ As a result, the Court concluded that “[e]avesdropping accomplished by means of such a physical intrusion is beyond the pale of even those decisions in which a closely divided Court has held that eavesdropping accomplished by other electronic means did not amount to an invasion of Fourth Amendment rights.”¹⁰⁶ The Court emphasized the importance of the home, and the protections provided to the home by the Fourth Amendment:

The Fourth Amendment, and the personal rights which it secures, have a long history. At the very core stands the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion. This Court has never held that a federal officer may without warrant and without consent physically entrench into a man’s office or home, there secretly observe or listen, and relate at the man’s subsequent criminal trial what was seen or heard.¹⁰⁷

Even though the Court was able to decide *Silverman* using traditional Fourth Amendment tests, the Court was cognizant that the problem of advancing technology would soon require its attention.¹⁰⁸ In distinguishing *Olmstead* and *Goldman*, while the Court indicated that it need not decide the issue in that case, the *Silverman* Court suggested that it was well

¹⁰⁴ *Id.* at 510.

¹⁰⁵ *Id.* at 511.

¹⁰⁶ *Id.* at 509-10.

¹⁰⁷ *Id.* at 511-12.

¹⁰⁸ In *On Lee v. United States*, 343 U.S. 747 (1952), petitioner was convicted of selling opium based on two conversations that he had with an undercover agent who was wearing a small microphone that he used to transmit the conversations to the police. *Id.* at 747. Petitioner objected because one of the conversations took place at his place of business. *Id.* at 751-52. Nevertheless, the Court admitted the evidence, and rejected the argument that the Fourth Amendment had been violated:

The presence of a radio set is not sufficient to suggest more than the most attenuated analogy to wiretapping. Petitioner was talking confidentially and indiscreetly with one he trusted, and he was overheard. This was due to aid from a transmitter and receiver, to be sure, but with the same effect on his privacy as if agent Lee had been eavesdropping outside an open window.

Id. at 753-54.

aware of “the Fourth Amendment implications of these and other frightening paraphernalia which the vaunted marvels of an electronic age may visit upon human society.”¹⁰⁹

II. *KATZ* AND THE “REASONABLE EXPECTATION OF PRIVACY” TEST

While the concepts of “trespassory invasions” and “intrusions into constitutionally protected areas” may have made sense as applied to a house, a car or a briefcase, those concepts did not produce satisfactory results as advancing technology provided police investigators with ever more sophisticated surveillance technologies. The holdings in *Olmstead*, *Goldman*, and *Silverman* reveal this fact. As a result, over time, it was perhaps inevitable that the Court would begin to take notice of the ideas articulated by the dissenters in *Olmstead* and *Goldman* and begin to formulate a new approach responsive to advancing technology. That happened in the Court’s decision in *Katz v. United States*,¹¹⁰ in which the Court finally formulated a new approach for defining the term “search” under the Fourth Amendment, particularly as that term is applied to technology.

Katz involved a man suspected of involvement in illegal bookmaking operations who placed a phone call from a telephone booth. Police, anticipating that Katz would make the call, placed an electronic bug on the outside of the booth which enabled them to record the conversation.¹¹¹ During the call, Katz made incriminating statements that were used against him in a subsequent prosecution. Relying on the Court’s prior precedent, the government argued that the police did not engage in a “search” when they bugged the phone booth.¹¹² Since there was no “intrusion” into the phone booth, and there was doubt about whether the booth would be regarded as a “constitutionally protected area” anyway, it was not clear that the

¹⁰⁹ 365 U.S. at 509.

¹¹⁰ 389 U.S. 347 (1967).

¹¹¹ *Id.* at 348.

¹¹² *Id.* at 352.

police had conducted a “search” within the meaning of the Fourth Amendment. Certainly, under the Court’s prior precedent (e.g., *Olmstead*, *Goldman*, and *Silverman*), there was merit to the government’s argument. The electronic bug placed by the police had done nothing more than passively collect sounds emanating from a public phone booth.

The Court disagreed with the government and held that police use of the listening device to overhear Katz’s conversation constituted a “search” within the meaning of the Fourth Amendment.¹¹³ In reaching that result, the *Katz* Court abandoned *Olmstead*’s focus on whether there had been an “intrusion into a constitutionally protected area,”¹¹⁴ and it also abandoned the requirement of a “trespass.”¹¹⁵ Instead, the Court focused on whether governmental officials had violated Katz’s “expectation of privacy,”¹¹⁶ and in doing so the Court explicitly claimed to shift its Fourth Amendment focus from places to persons.¹¹⁷ As the Court stated: “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.”¹¹⁸ Justice Harlan, concurring, agreed with the Court that the focus should be on whether Katz had an expectation of privacy (EOP), but he argued that the expectation must be one that society was prepared to recognize as “reasonable.”¹¹⁹ Ultimately, Harlan’s requirement

¹¹³ *Id.* at 353.

¹¹⁴ *Id.* (“Thus, although a closely divided Court supposed in *Olmstead* that surveillance without any trespass and without the seizure of any material object fell outside the ambit of the Constitution, we have since departed from the narrow view on which that decision rested.”).

¹¹⁵ *Id.* (“Indeed, we have expressly held that the Fourth Amendment governs not only the seizure of tangible items, but extends as well to the recording of oral statements overheard without any ‘technical trespass under . . . local property law.’” (quoting *Silverman v. United States*, 365 U.S. 505, 511 (1961))).

¹¹⁶ *Id.* at 351-52.

¹¹⁷ *Id.* at 351 (“For the Fourth Amendment protects people, not places.”).

¹¹⁸ *Id.* at 351 (citations omitted).

¹¹⁹ *Id.* at 361 (Harlan, J., concurring).

As the Court’s opinion states, “the Fourth Amendment protects people, not places.” The question, however, is what protection it affords to those people.

of “reasonableness” was integrated into the EOP test so that the Court inquired whether the police had intruded upon an individual’s “reasonable expectation of privacy” (REOP).

Under the *Katz* approach, each case must be evaluated on its own facts.¹²⁰ In the *Katz* case itself, the Court concluded that government agents had conducted a “search.”¹²¹ By using the listening device to overhear *Katz*’s private conversation, the police had intruded upon *Katz*’s expectation of privacy.¹²² Even though the police had not entered the booth, his expectations of having a private telephone conversation were thwarted by virtue of the fact that the listening device was used to listen to and record the contents of his conversation:

The Government stresses the fact that the telephone booth from which the petitioner made his calls was constructed partly of glass, so that he was as visible after he entered it as he would have been if he had remained outside. 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. One who occupies it, shuts the door behind him, and pays the toll that permits him to place a call is

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.”

Id.

¹²⁰ *Id.*

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. On the other hand, conversations in the open would not be protected against being overheard, for the expectation of privacy under the circumstances would be unreasonable.

Id.

¹²¹ *Id.* at 353.

¹²² *Id.*

surely entitled to assume that the words he utters into the mouthpiece will not be broadcast to the world. To read the Constitution more narrowly is to ignore the vital role that the public telephone has come to play in private communication.¹²³

In *Bond v. United States*,¹²⁴ as well as in other later decisions,¹²⁵ the Court interpreted the *Katz* formulation as requiring proof of two things in order to establish a search. First, “whether the individual, by his conduct, has exhibited an actual expectation of privacy; that is, whether he has shown that he [sought] to preserve [something] as private.”¹²⁶ Second, “whether the individual’s expectation of privacy is ‘one that society is prepared to recognize as reasonable.’”¹²⁷ Only if these two questions are answered in the affirmative would the Court conclude that there had been a search within the meaning of the Fourth Amendment.

III. POST-*KATZ* PRECEDENT AND APPLICATION OF THE REOP TEST

When it was initially decided, *Katz* might have been regarded as a hopeful decision for individual freedom and as a viable platform for dealing with the immense problems presented by advancing technology, problems that had perplexed the Court for decades. The REOP concept had the potential to reshape Fourth Amendment jurisprudence and provide substantial protection to individuals against the potential intrusions of modern technology. If the concept of a “reasonable expectation of privacy” was expansively construed, many more types of governmental actions might be regarded as “searches” within the meaning of the Fourth Amendment, including many new and developing forms of technology. As a result, these activities would be subject to the Fourth Amendment reasonable-

¹²³ *Id.* at 352.

¹²⁴ 529 U.S. 334 (2000).

¹²⁵ See *Minnesota v. Carter*, 525 U.S. 83 (1998); *Smith v. Maryland*, 442 U.S. 735, 740 (1979).

¹²⁶ *Bond*, 529 U.S. at 338 (quoting *Smith*, 442 U.S. at 740 (1979)).

¹²⁷ *Id.*

ness limitation, and police would have to comply with Fourth Amendment procedures when a warrant was required. Indeed, in the *Katz* decision itself, the Court used the REOP test to treat police activity as a search in a context that would not have been regarded as a search under the Court's pre-*Katz* precedent. As a result, some commentators tended to view *Katz* as a decision that would enhance the protection of individual privacy.¹²⁸

Although there have been some hopeful statements in recent decisions regarding the meaning of the REOP test, the jury is still out regarding the significance and worth of that test. As it has been interpreted and applied thus far, it is far from clear that *Katz* established a sound framework for Fourth Amendment analysis, or for dealing with the implications of advancing technology. Post-*Katz* decisions continued to reveal many of the fault lines evident in the Court's pre-*Katz* Fourth Amendment jurisprudence as some Justices viewed the *Katz* test expansively and aspirationally, in the spirit of the Brandeis, Butler, and Murphy dissents in *Olmstead* and *Goldman*, whereas other Justices viewed the *Katz* test more narrowly and restrictively. These fault lines were particularly evident when the Court tried to apply the test to new forms of technology. However, the fault lines were also evident even in situations when the Court sought to apply the REOP test in other contexts. The Court simply did not develop a workable framework for determining whether a REOP exists, or for determining how the REOP test should be applied to new technologies.

Perhaps the problem with the *Katz* test lies with the nature of the test itself. In *Katz*, the Court decided to use case-by-case analysis by creating a vague standard—reasonable expectation of privacy—that had to be applied to the facts of individual cases.¹²⁹ The test itself is necessarily vague and did not

¹²⁸ See Amsterdam, *supra* note 20, at 385 ("As a doctrinal matter, it seems clear that the effect of *Katz* is to expand rather than generally to reconstruct the boundaries of Fourth Amendment protection.").

¹²⁹ I do not mean suggest that a bright-line rule would have been preferable in this area of the law. For one thing, it is not entirely clear how the Court could have formulated a bright-line rule that would have been effective, and that would have provided future courts with clear guidance regarding how to handle new forms of technology.

provide precise direction or guidance to later courts.¹³⁰ Although it is possible to produce a rational, well-defined and consistent body of doctrine under a case-by-case approach, a body of doctrine usually emerges and develops over time from a well-considered set of decisions. In that way, vague terms like “reasonableness” and “expectation of privacy” gain content and meaning. The difficulty is that the development of a case-by-case approach is affected by who (which judges or justices) is applying the test, and how they are developing its meaning. If Justices view the REOP test narrowly, then the test will not provide much protection for individual privacy and will not provide much of a barrier against the intrusions of modern technology. On the other hand, if the judges view the REOP test aspirationally in the sense of trying to envision how the scope of privacy should be viewed in a free society, as Justice Brandeis and Justice Murphy did in their *Olmstead* dissents,¹³¹ and Justice Murphy did in his *Goldman* dissent,¹³² then the test takes on a quite different meaning and can have different implications for the protection of individual privacy.

The REOP test has borne limited fruit because of the circumstances under which it has been applied. The test was created during the Warren Court era, a period when the Court tended to view the Fourth Amendment more expansively, as it

The Court has articulated bright-line rules in various contexts, including the right to counsel cases, *see, e.g.*, *Scott v. Illinois*, 440 U.S. 367, 373-74 (1979) (providing that the right to counsel applies when a criminal defendant has received a penalty of actual imprisonment), and the privilege against self-incrimination cases. *See Miranda v. Arizona*, 384 U.S. 436 (1966) (requiring police to administer a *Miranda* warning before engaging in custodial interrogation of a suspect). However, the “bright-line” rules articulated in those cases have not always been so bright, or clear, and have themselves produced judicial uncertainty. For example, the *Miranda* decisions (establishing rules governing custodial interrogations of suspects) have produced much litigation regarding various aspects of the *Miranda* warnings. The Court has, for example, struggled to define and apply the various components of the *Miranda* test. *See* RUSSELL L. WEAVER, LESLIE W. ABRAMSON, RONALD J. BACIGAL, JOHN M. BURKOFF, CATHERINE HANCOCK & JANET C. HOEFFEL, *CRIMINAL PROCEDURE: CASES, PROBLEMS AND EXERCISES* 482-552 (4th ed. 2010). It has also struggled with issues relating to the right to counsel.

¹³⁰ *See, e.g.*, Amsterdam, *supra* note 20, at 383 (suggesting perspectives on how a REOP should be ascertained).

¹³¹ *See supra* notes 64-78 and accompanying text.

¹³² *See supra* notes 88-97 and accompanying text.

did other criminal procedure protections,¹³³ but was interpreted and defined by the Burger Court and Rehnquist Court, which had a tendency to be less protective in the criminal procedure arena generally.¹³⁴ Indeed, both the Burger Court and Rehnquist Court imposed a number of restrictions on the rights of criminal defendants in such diverse areas as ineffective assistance of counsel,¹³⁵ the exclusionary rule,¹³⁶ and the definition of probable cause.¹³⁷ Understandably, the Burger Court and the Rehnquist Court did not tend to view *Katz's* REOP test expansively and did not construe that decision as being particularly protective of either privacy, specifically, or of Fourth Amendment rights in general.¹³⁸ In addition, early Burger Court and Rehnquist Court decisions did not provide much hope that the REOP test could adequately deal with the implications of advancing technology.

¹³³ See, e.g., *Camara v. Mun. Court*, 387 U.S. 523 (1967) (holding that administrative inspections are subject to Fourth Amendment requirements and protections); *Miranda v. Arizona*, 384 U.S. 436 (1966) (requiring that criminal suspects be given a *Miranda* warning before being subjected to custodial interrogation); *Gideon v. Wainwright*, 372 U.S. 335, 344 (1963) (accordng indigent defendants, in state court criminal proceedings, the right to state-provided attorneys); *Mapp v. Ohio*, 367 U.S. 643, 655-56 (1961) (extending the exclusionary evidence rule to state court proceedings).

¹³⁴ See, e.g., *New York v. Quarles*, 467 U.S. 649, 655-56 (1984) (creating a "public safety" exception to *Miranda*); *United States v. Janis*, 428 U.S. 433, 459-60 (1976) (allowing the government to use illegally obtained evidence in a civil proceeding).

¹³⁵ See *Strickland v. Washington*, 466 U.S. 668, 688-89 (1984) (creating standards for assertion of ineffective assistance of counsel claims that make it difficult for convicts to prevail).

¹³⁶ See *United States v. Leon*, 468 U.S. 897, 906-08 (1984) (restricting the exclusionary evidence rule by establishing a good-faith exception and subjecting the rule to cost-benefit analysis).

¹³⁷ See *Illinois v. Gates*, 462 U.S. 213, 238 (1983) (altering the probable cause requirement).

¹³⁸ See, e.g., *Florida v. Riley*, 488 U.S. 445, 445-46 (1989) (allowing police to fly a helicopter at low altitude over the curtilage of Riley's property for surveillance purposes); *California v. Greenwood*, 486 U.S. 35, 39-41 (1988) (holding that Greenwood did not have a REOP as to trash left in front of his house for trash collectors to retrieve); *California v. Ciraolo*, 476 U.S. 207, 213-14 (1986) (holding that police could fly a helicopter at low altitude over Ciraolo's property for surveillance purposes); *United States v. Knotts*, 460 U.S. 276, 281-82 (1983) (allowing police to use an electronic beeper to track Knott's movements); *Rakas v. Illinois*, 439 U.S. 128, 148-49 (1978) (holding that a passenger in a vehicle did not have a REOP as to items found in the vehicle).

As one analyzes the Court's post-*Katz* decisions, it becomes clear that *Katz* protects individuals against certain types of intrusions. For example, absent unusual circumstances, the Court would find a REOP (and, therefore, a search) if the police break into a private home and search it from top to bottom,¹³⁹ or they search an individual,¹⁴⁰ a passenger's luggage¹⁴¹ or an owner's vehicle.¹⁴² For example, in *Safford Unified School District #1 v. Redding*,¹⁴³ the Court easily found a violation of a high-school student's REOP when school officials subjected her to a strip search¹⁴⁴ and also searched her backpack.¹⁴⁵ Likewise, in *Winston v. Lee*,¹⁴⁶ the Court held that a

¹³⁹ See, e.g., *Georgia v. Randolph*, 547 U.S. 103 (2006); *Groh v. Ramirez*, 540 U.S. 551 (2004); see *Payton v. New York*, 445 U.S. 573, 585 (1980) (suggesting that searches of the home were one of the primary evils at which the Fourth Amendment was directed).

¹⁴⁰ See, e.g., *Safford Unified Sch. Dist. #1 v. Redding*, 129 S. Ct. 2633, 2637 (2009) (strip search of a high school student); *Terry v. Ohio*, 392 U.S. 1, 29-31 (1968) (holding that a police officer's frisk of Terry constituted a search within the meaning of the Fourth Amendment, albeit a reasonable one).

¹⁴¹ See, e.g., *Florida v. Royer*, 460 U.S. 491, 498-508 (1983) (holding that police intrusion into the contents of baggage constitutes a search within the meaning of the Fourth Amendment); see also *Bond v. United States*, 529 U.S. 334, 338-39 (2000) (a search was committed when police physically manipulated Bond's bag in order to ascertain the nature of its contents).

¹⁴² See, e.g., *Arizona v. Gant*, 129 S. Ct. 1710 (2009) (holding that a search occurs when the police search a vehicle incident to an arrest); *California v. Acevedo*, 500 U.S. 565 (1991) (discussing the rules applicable to automobile searches); *New York v. Class*, 475 U.S. 106, 112-13 (1986) (holding that a police officer committed a search, within the meaning of the Fourth Amendment, when he entered a vehicle to move papers (so that he could see the vehicle's Vehicle Identification Number) and happened to see a weapon).

¹⁴³ 129 S. Ct. 2633 (2009).

¹⁴⁴ *Id.* at 2641.

The very fact of Savana's pulling her underwear away from her body in the presence of the two officials who were able to see her necessarily exposed her breasts and pelvic area to some degree, and both subjective and reasonable societal expectations of personal privacy support the treatment of such a search as categorically distinct, requiring distinct elements of justification on the part of school authorities for going beyond a search of outer clothing and belongings.

Id.

¹⁴⁵ *Id.* at 2641 n.3.

There is no question here that justification for the school officials' search was required in accordance with the *T.L.O.* standard of reasonable suspicion, for

governmental attempt to force an individual to submit to surgery to remove a bullet (which would have provided evidence regarding his involvement in an attempted robbery) would constitute a search within the meaning of the Fourth Amendment. However, these factual scenarios are hardly cutting-edge, and they do not involve the use of sophisticated technologies. Moreover, all of these scenarios are explicitly protected under the literal language of the Fourth Amendment, which provides protection for persons, papers, houses and effects,¹⁴⁷ and one might guess that the Court would have found that a search had been committed in these situations even under its pre-*Katz* precedent. All involved either searches of persons, or searches of “constitutionally protected areas,” and all would have received protection under decisions like *Olmstead*, *Goldman*, and *Silverman*.

In order to fairly assess *Katz*'s impact on Fourth Amendment jurisprudence, it is necessary to look at other contexts in which the REOP test has been defined and is especially important to ascertain how the test has been applied to new forms of technology. When analyzed in this way, it is difficult to argue that the *Katz* test has dramatically reshaped the Court's approach to search issues, or for that matter has provided much additional protection for privacy interests, and it is far from clear that the REOP test provides a sound basis for addressing issues related to new forms of technology. The limited nature of the test's impact is belied by the nature of the *Katz* decision

it is common ground that Savana had a reasonable expectation of privacy covering the personal things she chose to carry in her backpack and that Wilson's decision to look through it was a “search” within the meaning of the Fourth Amendment.

Id. (citation omitted).

¹⁴⁶ 470 U.S. 753, 766 (1985).

¹⁴⁷ In another not terribly surprising decision, *Hudson v. Palmer*, 468 U.S. 517 (1984), the Court concluded that a prisoner did not have a REOP in his prison cell. *Id.* at 525-26. The case arose when prison officials did a shakedown of an inmate's cell for contraband, discovered a ripped pillow case, and disciplined the prisoner for destroying state property. *Id.* at 519. Noting that imprisonment brings with it the loss of various rights, the Court was unwilling to recognize that prisoners had legitimate expectations of privacy in their cells. *Id.* at 527-28. In addition, the Court emphasized the security needs of penal institutions. *Id.*

itself, which seemed to offer a new approach to, and a way to deal with, the problem of new technologies. The concern is whether *Katz* is the exception (with a few other exceptions that will be noted below) in this line of precedent which proves *Katz's* lack of impact.

Looked at in its entirety, including the bulk of United States Supreme Court cases construing *Katz*, the Court has construed the REOP test rather narrowly in the sense that there are few cases when the Court has found that a REOP exists when it would not have found a search under its pre-*Katz* precedent. In a number of cases, the Court has concluded either that there was no REOP (and, therefore, no search) in the particular case before the Court, or the Court has held that defendants did not have standing to assert Fourth Amendment rights because they lacked a REOP. In only a few limited situations has the Court expanded the definition of a search beyond its pre-*Katz* limits. As a result, for those who harbored hope that *Katz* would expand Fourth Amendment jurisprudence, and might provide a bulwark against advancing technology, those hopes have not been fully realized thus far.

A. Post-Katz Standing Decisions

The limited impact of the REOP test is illustrated by the Court's decisions regarding standing to assert Fourth Amendment rights. The standing decisions are an important indicator of *Katz's* meaning because the Court has applied the REOP test in determining whether an individual has standing to litigate a Fourth Amendment claim, as well as because they indicate the scope and content of a REOP. However, the Court has restrictively construed the REOP test in those decisions, which reveal many of the fault lines that were evident in the Court's pre-*Katz* precedent.

Passengers in Automobiles. Even though *Katz* purported to abandon the property-based distinctions that prior decisions had relied on, including the concepts of trespass and constitutionally protected areas, the Court has had difficulty developing secure moorings for the REOP test apart from property

principles. For example, in *Rakas v. Illinois*,¹⁴⁸ the Court considered whether a passenger in a vehicle had standing to challenge a search of that vehicle.¹⁴⁹ Under the Court's pre-*Katz* precedent, specifically *Jones v. United States*,¹⁵⁰ Rakas could have established standing on the basis that the search was "directed" at him, or on the basis that he was "legitimately on [the] premises" (in this case, more precisely, in the vehicle) at the time of the search. In *Rakas*, the Court held that *Katz* and the REOP test should be used to determine whether Rakas had standing to challenge the search rather than the property principles that had previously been used.¹⁵¹ However, the Court did not provide novel content to the REOP test, but instead seemed to revert to property principles in deciding whether a REOP existed. In concluding that Rakas did not have standing, the Court emphasized that Rakas did not have a property or possessory interest in the vehicle, or interest in the property seized.¹⁵² The Court held that a passenger in the vehicle would have no expectation of privacy in the places the contraband was found (under the car seat and in the glove compartment).¹⁵³ The Court declined to apply *Jones*, which it distinguished, noting that Jones was in an apartment by himself with a key and had the right to exclude others. Therefore, he

¹⁴⁸ 439 U.S. 128 (1978).

¹⁴⁹ *Id.* at 143.

¹⁵⁰ 362 U.S. 257 (1960).

¹⁵¹ *Rakas*, 439 U.S. at 143 (citations omitted).

Katz held that capacity to claim the protection of the Fourth Amendment depends not upon a property right in the invaded place but upon whether the person who claims the protection of the Amendment has a legitimate expectation of privacy in the invaded place *Jones* can best be explained by the fact that Jones had a legitimate expectation of privacy in the premises he was using and therefore could claim the protection of the Fourth Amendment with respect to a governmental invasion of those premises, even though his "interest" in those premises might not have been a recognized property interest at common law.

Id.

¹⁵² *Id.* at 148.

¹⁵³ *Id.* at 148-49.

had a REOP in the apartment even though he did not own or hold a possessory interest in the apartment.¹⁵⁴

The *Rakas* interpretation of the REOP test was hardly expansive, and a dissenting Justice White challenged what he regarded as the Court's fairly narrow conception of REOP. He argued that a passenger has a REOP in a vehicle in which he is riding: "[S]urely a person riding in an automobile next to his friend the owner, or a child or wife with the father or spouse, must have some protection . . ." ¹⁵⁵ Even though *Rakas* did not have an ownership interest or a possessory interest in the vehicle, Justice White contended that he had an interest in protecting his "personal freedom from unreasonable governmental intrusion."¹⁵⁶ Justice White's more serious complaint was that, even though the *Katz* Court purported to abandon property principles in favor of the REOP test, the Court considered only property principles in determining whether *Rakas*' REOP had been invaded.¹⁵⁷ In his view, the Court construed the REOP

¹⁵⁴ *Id.* at 149.

¹⁵⁵ *Id.* at 166 (White, J., dissenting).

¹⁵⁶ *Id.* at 164-65, 166.

[T]he Court asserts that it is not limiting the Fourth Amendment bar against unreasonable searches to the protection of property rights, but in reality it is doing exactly that. Petitioners were in a private place with the permission of the [owner]. . . . [I]f that is not sufficient, what would be? . . . [I]t is hard to imagine anything short of a property interest that would satisfy the majority. Insofar as the Court's rationale is concerned, no passenger in an automobile, without an ownership or possessory interest and regardless of his relationship to the owner, may claim Fourth Amendment protection against illegal stops and searches of the automobile in which he is rightfully present.

Id.

¹⁵⁷ *Id.* at 166-67. He went on to note that:

The Court's reliance on property law concepts is additionally shown by its suggestion that visitors "could content the lawfulness of the seizure of evidence or the search if their own property were seized during the search." What difference should that property interest make to constitutional protection against unreasonable searches, which is concerned with privacy? . . . [A] legitimate passenger in a car expects to enjoy the privacy of the vehicle whether or not he happens to carry some item along for the ride. We have never before limited our concern for a person's privacy to those situations in which he is in possession of personal property. Even a person living in a barren room without possessions is entitled to expect that the police will not intrude without cause.

test too narrowly and “contrary . . . to the everyday expectations of privacy that we all share.”¹⁵⁸

Peering Through Drawn Window Blinds. The Court followed *Rakas* with its decision in *Minnesota v. Carter*¹⁵⁹ and again adopted a fairly narrow view of the REOP test. In that case, while Carter and the lessee of an apartment were inside the apartment, a police officer peered through a drawn window blind and saw them bagging cocaine.¹⁶⁰ In holding that Carter did not have a REOP in the apartment, the Court relied on *Rakas*, and its property-based analysis, and focused on whether Carter had a sufficient interest in the place being searched to allow him to challenge the officer’s decision to peer through the window.¹⁶¹ Although the Court paid lip service to *Katz* and the idea that the Fourth Amendment protects people rather than places, it emphasized that the “extent to which the Fourth Amendment protects people may depend upon where those people are,” and whether the person has a “legitimate expectation of privacy in the invaded place.”¹⁶² Since Carter was not the lessee of the apartment, and was in the apartment solely to conduct a business transaction,¹⁶³ the Court concluded that his expectation of privacy in this “business property” (the court treated the apartment as a business property because Carter

Id. at 167 n.142 (citations omitted).

¹⁵⁸ *Id.* at 167.

¹⁵⁹ 525 U.S. 83 (1998).

¹⁶⁰ *Id.* at 85.

¹⁶¹ *Id.* at 87-88; *see Rakas*, 439 U.S. at 143-44, & n.12 (majority opinion).

¹⁶² 525 U.S. at 88.

[I]n order to claim the protection of the Fourth Amendment, a defendant must demonstrate that he personally has an expectation of privacy in the place searched, and that his expectation is reasonable; *i.e.*, one that has “a source outside of the Fourth Amendment, either by reference to concepts of real or personal property law or to understandings that are recognized and permitted by society.”

Id. (quoting *Rakas*, 439 U.S. 128, 143 n.12 (1978)).

¹⁶³ *Id.* at 89 (“While the apartment was a dwelling place for Thompson, it was for these respondents simply a place to do business.”).

was there to conduct business) was much lower,¹⁶⁴ and therefore, he had no REOP in the apartment.¹⁶⁵

As with the decision in *Rakas*, the Court's interpretation of the REOP standard in *Carter* was relatively narrow, and some Justices argued that the Court should adopt a more expansive interpretation of the REOP test. Justice Kennedy concurred in *Carter*, but argued that "almost all social guests have a legitimate expectation of privacy, and hence protection against unreasonable searches, in their host's home."¹⁶⁶ Justice Ginsburg, joined by Justices Stevens and Souter, dissented, and argued that *Carter* had a REOP in the premises regardless of whether he was engaged in a business transaction.¹⁶⁷ She was willing to find a REOP whenever a homeowner (or lessee) personally invites someone into his/her home for any reason,¹⁶⁸ and therefore allows the visitor to share his "protection against unreasonable searches and seizures."¹⁶⁹ She also rejected the argument that it mattered whether the guest entered the home to conduct a business transaction, noting that *Katz* involved an individual who made a business call from a phone booth, but was nonetheless regarded as having a REOP regarding the contents of the call.¹⁷⁰ Justice Ginsburg saw no meaningful difference between *Carter* and *Katz*.¹⁷¹

Search of Another Person's Purse (containing the defendant's personal property). *Rakas* was also followed by a similar holding in *Rawlings v. Kentucky*.¹⁷² In that case, Rawlings has-

¹⁶⁴ *Id.* at 90-91.

¹⁶⁵ *Id.* at 89.

¹⁶⁶ *Id.* at 101 (Kennedy, J., concurring).

¹⁶⁷ *Id.* at 106 (Ginsburg, J., dissenting).

¹⁶⁸ *Id.* at 106-07. For Justice O'Connor it did not matter whether the guest was admitted "for conversation, to engage in leisure activities, or for business purposes licit or illicit . . ." *Id.* at 106.

¹⁶⁹ *Id.* at 109. Of course, in her view, the guest's expectation would only extend to the parts of the house to which he/she had been admitted, and the expectation would not include the likes of a "milkman or pizza deliverer." *Id.*

¹⁷⁰ *Id.* at 111.

¹⁷¹ *Id.* at 111-12 ("I do not agree that we have a more reasonable expectation of privacy when we place a business call to a person's home from a public telephone booth on the side of the street than when we actually enter that person's premises to engage in a common endeavor." (citations omitted)).

¹⁷² 448 U.S. 98 (1980).

tily stashed LSD tablets and other illegal drugs in Cox's purse as the police arrived at a house to conduct a search. Cox emptied her purse, in response to a police command, and then told Rawlings "to take what was his."¹⁷³ Rawlings claimed ownership of the controlled substances, and was arrested for possession of the controlled substances recovered from Cox's purse. When he sought to suppress the evidence, the Court concluded that Rawlings' expectation of privacy was not infringed by the police actions, and therefore there was no search as to him.¹⁷⁴ The Court emphasized that Rawlings had known Cox for only a few days, had never been given access to her purse before, did not claim the right to exclude others from the purse, and had placed the drugs in the purse quickly in a way which suggested that he had no privacy rights.¹⁷⁵ In addition, Rawlings had even denied that he had a subjective expectation in the purse.¹⁷⁶ The Court held that Rawlings' ownership of the drugs was insufficient to give him an expectation of privacy in the purse, noting that "arcane" property concepts do not control Rawlings' right to claim Fourth Amendment protections.¹⁷⁷

Once again, some Justices argued for a more expansive interpretation of the REOP test, and questioned the Court's decision. In dissent, Justice Marshall, joined by Justice Brennan, noted that the Fourth Amendment explicitly protects not only persons, houses and papers, but also "effects."¹⁷⁸ He argued that Rawlings' ownership of the "effects" (the drugs) should

¹⁷³ *Id.* at 98.

¹⁷⁴ *Id.* at 104-06.

¹⁷⁵ *Id.* at 104-05.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 117-18 (Brennan, J., dissenting).

The Fourth Amendment, it seems to me, provides in plain language that if one's security in one's "effects" is disturbed by an unreasonable search and seizure, one has been the victim of a constitutional violation; and so it has always been understood. Therefore the Court's insistence that in order to challenge the legality of the search one must also assert a protected interest in the premises is misplaced. The interest in the item seized is quite enough to establish that the defendant's personal Fourth Amendment rights have been invaded by the government's conduct.

Id.

have given him standing to challenge the search¹⁷⁹ because the Fourth Amendment does not protect only people and places.¹⁸⁰

The bottom line is that, as the REOP test has been interpreted and applied in the standing decisions, *Katz* did not have the effect of expanding Fourth Amendment protections. From the perspective of standing issues, the *Katz* decision clearly had a negative effect. Under the Court's pre-*Katz* precedent, particularly the Court's standing decision in *Jones*, both *Rakas* and *Carter* could have established standing to challenge the searches. Under *Katz*, the Court altered its standing jurisprudence to focus on whether *Rakas* had a REOP in the vehicle, construed the concept of a REOP narrowly, and concluded that *Rakas* did not possess a REOP.¹⁸¹ In addition, *Rakas* and *Carter* focused on property principles, and chose to construe the REOP test narrowly. For those who had hoped that the REOP test would provide expanded protections against privacy, or a way to deal with the encroachments of modern technology, none of the decisions offered much hope.

B. Katz and the Court's Non-Technology Decisions

Katz's meaning is also revealed by the Court's non-technology decisions applying the REOP test. Although the Court has found a REOP in some of these cases, many decisions involved factual patterns where the Court's pre-*Katz* jurisprudence would have found a search as well.¹⁸² In the post-

¹⁷⁹ *Id.* at 115.

¹⁸⁰ *Id.* at 117.

The Court's decision today is not wrong, however, simply because it is contrary to our previous cases. It is wrong because it is contrary to the Fourth Amendment, which guarantees that "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated." The Court's reading of the Amendment is far too narrow. The Court misreads the guarantee of security "*in* their persons, houses, papers, and effects, *against* unreasonable searches and seizures" to afford protection only against unreasonable searches and seizures *of* persons and places.

Id.

¹⁸¹ See *supra* notes 151-58 and accompanying text.

¹⁸² See discussion *supra* notes 55-62, 79, 90-97 and accompanying text.

Katz era, the Court did decide some cases involving novel applications of the REOP test, and these cases offer much insight into how the Court defines the REOP test, as well as into whether the REOP test will provide much protection against advancing technology. The results suggest that *Katz* did not have a major impact on the Court's definition of the term "search."

Open Fields. In *Oliver v. United States*,¹⁸³ the Court had a straightforward opportunity to demonstrate that the REOP test would produce different results than had been produced under the Court's prior tests. In its pre-*Katz* decision in *Hester v. United States*,¹⁸⁴ the Court held that police examination of "open fields" does not constitute a "search" within the meaning of the Fourth Amendment.¹⁸⁵ In *Oliver*, the Court had ample grounds for concluding that a REOP could exist, even in open fields, and therefore for overruling *Hester*. Oliver's farm was located in a secluded area bounded by woods, fences (some of which had locked gates), and embankments, and was posted with "No Trespassing" signs.¹⁸⁶ Government agents, who did not have a warrant to search the property, followed a footpath to the side of the gate and entered the field.¹⁸⁷ At one point, a man yelled at the officers that "No hunting is allowed" and demanded that they leave.¹⁸⁸ When the agents responded that they were police, the man disappeared.¹⁸⁹ Deep in the property, about a mile from Oliver's home, the officers found a field that contained marijuana.¹⁹⁰ Oliver was eventually convicted of manufacturing a controlled substance.

In deciding the case, the Court decided to reaffirm *Hester* and its pre-*Katz* jurisprudence. The Court observed that the Fourth Amendment explicitly protects "persons, houses, papers, and effects," and says nothing about protecting "open

¹⁸³ 466 U.S. 170 (1984).

¹⁸⁴ 265 U.S. 57 (1924).

¹⁸⁵ *Id.* at 59.

¹⁸⁶ *Oliver*, 466 U.S. at 173-74.

¹⁸⁷ *Id.* at 173 & n.1.

¹⁸⁸ *Id.* at 173.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

fields,”¹⁹¹ and the Court viewed the distinction between open fields and houses as being as “old as the common law.”¹⁹² Moreover, even though there was no indication that anyone could view the secluded fields from surrounding properties, the Court held that open fields can sometimes be viewed from public places, notwithstanding the presence of “No Trespassing” signs,¹⁹³ and that any expectation of privacy that Oliver might have held in his fields is not one that society was prepared to recognize as “reasonable.”¹⁹⁴

Consistent with its pre-*Katz* jurisprudence, the *Oliver* Court distinguished “open fields” from the “curtilage” immediately surrounding the home,” and suggested that “the 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 is the part that deserves protection under the Fourth Amendment.¹⁹⁵ In the Court’s opinion, it mattered not that the police had trespassed onto the fields.¹⁹⁶ In addition, the Court doubted that an individual could hold a REOP in open fields outside the curtilage of his house,¹⁹⁷ in part because individuals do not conduct “intimate activities” in such places, and the Court expressed doubt about whether the Fourth Amendment was “intended to shelter from government interference or surveillance” such activities as crop cultivation.¹⁹⁸

In *Oliver*, several Justices argued for a more expansive interpretation of the REOP test. Justice Marshall, joined by Justices Brennan and Stevens, dissented, forcefully arguing that

¹⁹¹ *Id.* at 171 (quoting *Hester v. United States*, 265 U.S. 57, 59 (1924)).

¹⁹² *Id.* at 176 (quoting *Hester*, 265 U.S. at 59).

¹⁹³ *Id.* at 179.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at 180 (quoting *Boyd v. United States*, 116 U.S. 616, 630 (1886)).

¹⁹⁶ *Id.* at 182-84.

¹⁹⁷ *Id.* at 178.

¹⁹⁸ *Id.* at 179. The Court went on to state that: “Rather, the correct inquiry is whether the government’s intrusion infringes upon the personal and societal values protected by the Fourth Amendment. As we have explained, we find no basis for concluding that a police inspection of open fields accomplishes such an infringement.” *Id.* at 182-83.

the Court had misapplied the REOP test.¹⁹⁹ In his view, several factors suggested that Oliver's expectation of privacy was reasonable, noting that Oliver owned the land,²⁰⁰ that it was protected by the law of trespass,²⁰¹ that it was not exposed to public view, that it might have been used for some quite intimate purposes,²⁰² and Oliver took steps to maintain his privacy, including the posting of "no trespassing" signs.²⁰³ He concluded with the observation that the "Fourth Amendment, properly construed, embodies and gives effect to our collective sense of the degree to which men and women, in civilized society, are entitled 'to be let alone' by their governments,"²⁰⁴ and he would have held that the police had committed a search within the meaning of the Fourth Amendment.²⁰⁵

Interestingly, the Court later departed from parts of the *Oliver* decision in its holdings in *California v. Ciraolo*²⁰⁶ and *Florida v. Riley*.²⁰⁷ In *Oliver*, the Court placed great emphasis on the idea of protecting the curtilage surrounding a home, and the expectations of privacy associated with the curtilage, but held that Oliver was growing the marijuana outside of the curtilage of his home. In *Ciraolo* and *Riley*, the Court held that there was no search when the police flew a helicopter over property at low altitudes to examine the curtilage of property.

¹⁹⁹ Indeed, he argued that a determination of whether a REOP existed should have depended on consideration of three factors:

First, we consider whether the expectation at issue is rooted in entitlements defined by positive law. Second, we consider the nature of the uses to which spaces of the sort in question can be put. Third, we consider whether the person claiming a privacy interest manifested that interest to the public in a way that most people would understand and respect.

Id. at 189 (Marshall, J., dissenting).

²⁰⁰ *Id.* at 190.

²⁰¹ *Id.* at 190-91.

²⁰² *Id.* at 192-93.

²⁰³ *Id.* at 193.

²⁰⁴ *Id.* at 197.

²⁰⁵ *Id.* at 195. Thus, Justice Marshall argued that "[p]rivate land marked in a fashion sufficient to render entry thereon a criminal trespass under the law of the State in which the land lies is protected by the Fourth Amendment's proscription of unreasonable searches and seizures." *Id.*

²⁰⁶ 476 U.S. 207, 213-14 (1986).

²⁰⁷ 488 U.S. 445, 449-51 (1989).

Garbage Collection. The Court had another chance to apply the REOP test in a novel context in *California v. Greenwood*.²⁰⁸ That case involved the question of whether the police conducted a search when they examined the Greenwoods' garbage. The case began when police received information suggesting that the Greenwoods might be involved in illegal narcotics trafficking.²⁰⁹ After some investigation, an officer asked the Greenwoods' trash collector to turn their trash over to them without mixing it with Greenwoods' neighbors' trash.²¹⁰ The officer searched the bags and found evidence of narcotics use.²¹¹ Later, police worked with the trash collector again and turned up additional evidence.²¹² Based on the evidence, police obtained and executed a search warrant for the Greenwoods' house, which revealed quantities of cocaine and hashish.²¹³

Greenwood presented the Court with a clear opportunity to show that the REOP test had impact beyond the *Katz* scenario that "[s]crutiny of another's trash is contrary to commonly accepted notions of civilized behavior,"²¹⁴ and that "members of our society will be shocked to learn that the Court, the ultimate guarantor of liberty, deems unreasonable our expectation that the aspects of our private lives that are concealed safely in a trash bag will not become public."²¹⁵ Plus, a trash bag is a common repository for personal effects²¹⁶ and noted that many cities prohibit the practice.²¹⁷

The Court approached the REOP test with a very different sort of analysis, concluding that the Greenwoods did not hold a REOP in their trash.²¹⁸ While the trash was lying by the curb,

²⁰⁸ 486 U.S. 35 (1988).

²⁰⁹ *Id.* at 37-38.

²¹⁰ *Id.* at 37.

²¹¹ *Id.* at 38.

²¹² *Id.*

²¹³ *Id.* at 37-38.

²¹⁴ *Id.* at 45 (Brennan, J., dissenting).

²¹⁵ *Id.* at 46.

²¹⁶ *Id.* at 51 ("Most of us, I believe, would be incensed to discover a meddler—whether a neighbor, a reporter, or a detective—scrutinizing our sealed trash containers to discover some detail of our personal lives.").

²¹⁷ *Id.* at 52.

²¹⁸ *Id.* at 41 (majority opinion).

it was accessible to “animals, children, scavengers, snoops, and other members of the public”²¹⁹ and the trash had been placed by the curb “for the express purpose of conveying it to a third party, the trash collector, who might himself have sorted through respondents’ trash or permitted others, such as the police, to do so.”²²⁰ As a result, since the Greenwoods placed the trash by the curb “in an area particularly suited for public inspection and, in a manner of speaking, public consumption, for the express purpose of having strangers take it,” the Court concluded that the Greenwoods could not have maintained a “reasonable expectation of privacy in the inculpatory items that they discarded.”²²¹

One of the extraordinary aspects of the *Greenwood* decision was the Court’s conclusion that Greenwood had exposed his garbage to public view,²²² and therefore could not object when the police also viewed it. The Court claimed that the police need not “avert their eyes from evidence of criminal activity that could have been observed by any member of the public,”²²³ and rejected the argument that state law enhanced the Greenwoods’ privacy expectations by making it illegal to go through their garbage.²²⁴ Justice Brennan, dissenting, rejected the idea that the Greenwoods had subjected their garbage to

²¹⁹ *Id.* at 40.

²²⁰ *Id.*

²²¹ *Id.* at 40-41 (quoting *United States v. Reicherter*, 647 F.2d 397, 399 (3d Cir. 1981)).

²²² *Id.* at 41.

²²³ *Id.*

²²⁴ *Id.* at 43-44.

We have never intimated, however, that whether or not a search is reasonable within the meaning of the Fourth Amendment depends on the law of the particular State in which the search occurs. We have emphasized instead that the Fourth Amendment analysis must turn on such factors as “our *societal* understanding that certain areas deserve the most scrupulous protection from government invasion.” We have already concluded that society as a whole possesses no such understanding with regard to garbage left for collection at the side of a public street. Respondent’s argument is no less than a suggestion that concepts of privacy under the laws of each State are to determine the reach of the Fourth Amendment. We do not accept this submission.

Id. (citing *Oliver v. United States*, 466 U.S. 170, 178 (1984)).

public view noting that, until the police opened the bags, their contents were shielded from public view.²²⁵

The mere possibility that unwelcome meddlers might open and rummage through the containers does not negate the expectation of privacy in their contents any more than the possibility of a burglary negates an expectation of privacy in the home; or the possibility of a private intrusion negates an expectation of privacy in an unopened package; or the possibility that an operator will listen in on a telephone conversation negates an expectation of privacy in the words spoken on the telephone.²²⁶

Indeed, the Greenwoods left their garbage at the curb because they were required to do so under local law.²²⁷

Inspecting the Interior of a Farm Barn. The Court also confronted a novel application of the REOP test in *United States v. Dunn*,²²⁸ a case in which police entered private property to peer into a barn. The property in question involved 198 acres, was completely encircled by a perimeter fence, and had several interior fences, constructed mainly of posts and multiple strands of barbed wire.²²⁹ The residence was situated one-half mile from a public road, and there was a fence around the residence as well as around a nearby small greenhouse.²³⁰ Two barns were located approximately fifty yards from the house fence.²³¹ The front of the larger of the two barns was enclosed by a wooden fence and had an open overhang.²³² Locked, waist-high gates barred entry into the barn, and netting material stretched from the ceiling to the top of the wooden gates.²³³ Despite the security, law enforcement officials made a warrantless entry onto the property and peered into the barns (after

²²⁵ *Id.* at 53-54 (Brennan, J., dissenting).

²²⁶ *Id.* at 54 (emphasis in original).

²²⁷ *Id.* at 54-55.

²²⁸ 480 U.S. 294 (1987).

²²⁹ *Id.* at 297.

²³⁰ *Id.*

²³¹ *Id.*

²³² *Id.*

²³³ *Id.*

crossing a barbed wire fence, as well as a wooden fence that enclosed the front portion of the barn, and walking under the barn's overhang to the locked wooden gates) where they shined a flashlight through the netting on top of the gates and observed what they took to be a phenylacetone laboratory.²³⁴ Based on their observations, police obtained a warrant to search the property, and the search turned up evidence used to convict defendants of manufacturing illegal drugs.²³⁵

Once again, the Court had the opportunity to adopt an expansive and protective definition of the REOP test, and there were ample grounds for finding a REOP. Justice Brennan, joined by Justice Marshall, made this point in his dissent. He argued that the barn was within the curtilage of Dunn's house²³⁶ and argued that "[o]ur society is not so exclusively urban that it is unable to perceive or unwilling to preserve the expectation of farmers and ranchers that barns and their contents are protected from (literally) unwarranted government intrusion."²³⁷ Indeed, he argued that a barn functions as an integral part of the buildings associated with a farm home,²³⁸ and that this barn fits within the general definition of curtilage because it was closely connected to the farm residence.²³⁹ Moreover, Dunn took "elaborate" precautions to protect his barn, including locking his driveway, fencing in the barn, and covering its open end with a locked gate and fishnetting,²⁴⁰ and indeed, he did everything he could do to protect the property against outsiders short of posting a guard.²⁴¹

In addition, Justice Brennan noted that the Court had traditionally protected business and commercial activities against unreasonable searches and seizures, and noted that a barn is part of a rancher's place of business.²⁴² As a result, he

²³⁴ *Id.*

²³⁵ *Id.*

²³⁶ *Id.* at 309.

²³⁷ *Id.* at 306.

²³⁸ *Id.* at 307 (quoting *Walker v. United States*, 225 F.2d 447, 449 (5th Cir. 1955)).

²³⁹ *Id.* at 310-11.

²⁴⁰ *Id.* at 312.

²⁴¹ *Id.*

²⁴² *Id.* at 315.

concluded that Dunn had established a REOP in his barn under the circumstances:

Looking into a building from a vantage point inaccessible to the public—here by climbing over the ‘substantial’ wooden fence enclosing the front of the barn to intrude on Dunn’s farmyard—is an unacceptable invasion of a reasonable privacy interest. When, as here, the public is excluded from an area immediately surrounding or adjacent to a business structure, that area is not—contrary to the Court’s position—part of the open fields.²⁴³

Once again, the Court disagreed, construing the REOP test more narrowly. Applying the “open fields” exception to the warrant requirement, the Court held that the barns were not part of the “curtilage” surrounding Dunn’s house and were not connected to the “intimate activity associated with the ‘sanctity of a man’s home and the privacies of life.’”²⁴⁴ The Court emphasized that the barn was sixty yards from the house itself and outside the fence surrounding the house, and therefore the officers had reason to believe that the barn was not being used for intimate activities. Although there were fences on the property, the Court concluded that “the fences were designed and constructed to corral livestock, not to prevent persons from observing what lay inside the enclosed areas.”²⁴⁵ The Court emphasized that the officers did not enter the barn, but rather simply viewed the interior of the barn from open fields, and concluded that the Fourth Amendment did not forbid this observation.²⁴⁶

Overnight Guests. One of the post-*Katz* decisions in which the Court adopted a more expansive view of the REOP test was the holding in *Minnesota v. Olson*.²⁴⁷ In that case, the Court held that an overnight guest in a house has a sufficient expectation of privacy in the house to have standing to challenge a

²⁴³ *Id.* at 318.

²⁴⁴ *Id.* at 300-01 (quoting *Oliver v. United States*, 466 U.S. 170, 180 (1984)).

²⁴⁵ *Id.* at 303.

²⁴⁶ *Id.* at 304.

²⁴⁷ 495 U.S. 91 (1990).

search of the house. As the Court noted: "To hold that an overnight guest has a legitimate expectation of privacy in his host's home merely recognizes the every day expectations of privacy that we all share."²⁴⁸ Overnight stays involve a "longstanding social custom that serves functions recognized as valuable by society," and the Court emphasized that people stay "in others' homes when we travel to a strange city for business or pleasure, when we visit our parents, children, or more distant relatives out of town, when we are in between jobs or homes, or when we house-sit for a friend."²⁴⁹ Indeed, an overnight guest seeks shelter in another person's home "precisely because it provides him with privacy, a place where he and his possessions will not be disturbed by anyone but his host and those his host allows inside."²⁵⁰ Further, people are most vulnerable when they are asleep; "when we cannot sleep in our own home we seek out another private place to sleep, whether it be a hotel room, or the home of a friend."²⁵¹

Olson was an important decision because it recognized that an overnight guest has a REOP in the house where he/she is staying. However, *Olson* did not suggest a major change in the Court's Fourth Amendment jurisprudence or an expansion of the Court's pre-*Katz* search precedent. Even under the Court's pre-*Katz* decisions, an overnight guest would have had standing to challenge a search of the place where he/she was staying.

Businesses (including Closely Regulated Businesses). Another area where the Court applied the REOP test a bit more expansively was in situations involving searches of businesses or commercial premises. The Court has held that an owner or operator of a business has a REOP in commercial premises,²⁵² including a right against administrative inspec-

²⁴⁸ *Id.* at 98.

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ *Id.* at 98-99.

²⁵² See *New York v. Burger*, 482 U.S. 691, 699 (1987); *Marshall v. Barlow's, Inc.*, 436 U.S. 307, 311-13 (1978) ("[I]t is untenable that the ban on warrantless searches was not intended to shield places of business as well as of residence.").

tions,²⁵³ but it has also held that the owner or operator of a business has a lesser expectation than an individual ordinarily has in a home.²⁵⁴ Nevertheless, in *Marshall v. Barlow's, Inc.*,²⁵⁵ the Court concluded that a factory owner had a REOP against governmental inspections pursuant to the Occupational Safety and Health Act.²⁵⁶ The critical question was whether the inspector or governmental agent is in a place open to the public, or a more private area.²⁵⁷ This point was illustrated in *Maryland v. Macon*,²⁵⁸ in which the Court held that a retail business did not have an expectation of privacy regarding wares offered to the public,²⁵⁹ or against a law enforcement official entering the public or retail portion of the business.²⁶⁰

When a “closely regulated” business is involved, the Court has held that there is no expectation of privacy.²⁶¹ The Court noted that: “Certain industries have such a history of government oversight that no reasonable expectation of privacy could exist for a proprietor over the stock of such an enterprise.”²⁶² The Court has applied this closely-regulated-industries exception to various businesses, including liquor dealers,²⁶³ pawnshop and firearms dealers,²⁶⁴ coal mines,²⁶⁵ and even automobile junkyards.²⁶⁶ In some instances, the Court suggests that

²⁵³ See *Marshall*, 436 U.S. at 307, 311-31 (“The Warrant Clause of the Fourth Amendment protects commercial buildings as well as private homes. To hold otherwise would belie the origin of that Amendment . . .”).

²⁵⁴ See *Burger*, 482 U.S. at 691, 699.

²⁵⁵ 436 U.S. 307, 311-13 (1978).

²⁵⁶ *Id.*

²⁵⁷ *Id.* at 315 (“What is observable by the public is observable, without a warrant, by the Government inspector as well.”).

²⁵⁸ 472 U.S. 463 (1985).

²⁵⁹ *Id.* at 469 (“Here, respondent did not have any reasonable expectation of privacy in areas of the store where the public was invited to enter and to transact business.”).

²⁶⁰ *Id.* (“The officer’s action in entering the bookstore and examining the wares that were intentionally exposed to all who frequent the place of business did not infringe a legitimate expectation of privacy and hence did not constitute a search within the meaning of the Fourth Amendment.”).

²⁶¹ *New York v. Burger*, 482 U.S. 691, 699-700 (1987).

²⁶² *Id.* at 700 (quoting *Marshall*, 436 U.S. at 313).

²⁶³ See *Colonnade Catering Corp. v. United States*, 397 U.S. 72 (1970).

²⁶⁴ See *United States v. Biswell*, 406 U.S. 311 (1972).

²⁶⁵ See *Donovan v. Dewey*, 452 U.S. 594, 603-04 (1981).

²⁶⁶ See *Burger*, 482 U.S. at 698.

the owners of such businesses have a “reduced” expectation of privacy,²⁶⁷ and therefore are subject to different and reduced Fourth Amendment requirements.²⁶⁸

Once again, in these administrative cases, the Court did not use the REOP standard to significantly expand the scope of Fourth Amendment rights. Prior to these decisions, the Court had decided some cases suggesting that administrative inspections were not subject to the Fourth Amendment,²⁶⁹ and the Court did reverse those decisions in its holding in *Camara v. Municipal Court*.²⁷⁰ However, in none of these cases did the Court use the REOP test to significantly expand Fourth Amendment rights, and in fact, *Camara* focused primarily on whether Fourth Amendment requirements could function effectively in the administrative inspection context rather than on the definition of a search.²⁷¹

Employee Desks, File Cabinets and Workspaces. The Court has used the REOP test to provide protections involving searches of employee work spaces. Illustrative is the plurality opinion in *O'Connor v. Ortega*.²⁷² The question was whether Ortega, a physician and psychiatrist at a state hospital had a REOP in his office, desk and file cabinets at his place of work. Ortega, who had primary responsibility for training young physicians in psychiatric residency programs, was under investigation for alleged improprieties (sexual harassment and improper solicitation of donations from subordinates).²⁷³ After he was placed on paid leave, and while investigating the charges against Ortega, several hospital personnel searched his office, including his desk and file cabinets, and seized several items.²⁷⁴

Applying the REOP test, the Court held that Ortega had a REOP in his office, including his desk and file cabinets.²⁷⁵ The

²⁶⁷ *Id.* at 701.

²⁶⁸ *Id.* at 702.

²⁶⁹ *See, e.g.*, *Frank v. Maryland*, 359 U.S. 360 (1959).

²⁷⁰ 387 U.S. 523 (1967).

²⁷¹ *Id.* at 530-31.

²⁷² 480 U.S. 709 (1987).

²⁷³ *Id.* at 709, 712.

²⁷⁴ *Id.* at 709, 712-13.

²⁷⁵ *Id.* at 719.

Court noted that, as “with the expectation of privacy in one’s home, such an expectation in one’s place of work is ‘based upon societal expectations that have deep roots in the history of the Amendment.’”²⁷⁶ Ortega’s REOP existed even though he was a public employee, and was using a public work space.²⁷⁷ However, the Court noted that an employee’s expectation of privacy in an office, desk or file cabinet depends on the circumstances, and may be limited by the circumstances that exist in the workplace, and that there may be no REOP in some situations.²⁷⁸ The Court emphasized that Ortega had used the office for seventeen years, did not share it with anyone, and that he kept various items (including personal items) in the office, and there was no policy preventing him from having personal items in his office.²⁷⁹

While *O’Connor* is clearly one decision in which the Court construes the REOP concept more expansively, it is not clear that the case would have been decided any differently under the Court’s pre-*Katz* jurisprudence, and therefore it is difficult to argue that *O’Connor* created a shift in the Court’s Fourth Amendment jurisprudence, or provided much protection against the specter of advancing technology.

Inspecting Shipped Packages. In its post-*Katz* decision in *United States v. Jacobsen*,²⁸⁰ the Court had a further opportunity to interpret the REOP test expansively, but declined to do so. Under the Court’s pre-*Katz* jurisprudence, in particular its holdings in *Ex parte Jackson*²⁸¹ and *Silverthorne Lumber Co. v. United States*,²⁸² the Court had held that individuals had a protected privacy interest in books and papers. In *Jacobsen*, the Court created an exception to those holdings. In *Jacobsen*,

²⁷⁶ *Id.* at 716 (quoting *Oliver v. United States*, 466 U.S. 170, 178 n.8 (1984)).

²⁷⁷ *Id.*

²⁷⁸ *Id.* at 717 (The Court stated that one’s REOP in a workplace environment “may be reduced by virtue of actual office practices and procedures, or by legitimate regulation” and the Court noted that “some government offices may be so open to fellow employees or the public that no expectation of privacy is reasonable.”).

²⁷⁹ *Id.* at 718-19.

²⁸⁰ 466 U.S. 109 (1984).

²⁸¹ 96 U.S. 727 (1877).

²⁸² 251 U.S. 385 (1920).

employees of a private freight carrier found a white powdery substance on a damaged package, and immediately opened it pursuant to company policy related to damaged packages and insurance claims.²⁸³ When they observed white powder inside the package, company employees called the police.²⁸⁴ When the police arrived, the box was still wrapped in brown paper, but had a hole punched in its side and an open top.²⁸⁵ The officer removed the plastic bags from the box, took a knife's blade's worth of each, and subjected the substance to a chemical analysis which revealed that it was cocaine.²⁸⁶ Since the initial opening of the package was done by private officials, the Court concluded that it did not implicate Jacobsen's expectation of privacy,²⁸⁷ or create a search,²⁸⁸ and therefore the government was free to use the information,²⁸⁹ and reopen and inspect the powder without committing a "search" within the meaning of the Fourth Amendment.²⁹⁰ Once again, Justice Brennan, joined

²⁸³ *Jacobsen*, 466 U.S. at 111.

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 111-12.

²⁸⁷ *Id.* at 119-20.

Respondents could have no privacy interest in the contents of the package, since it remained unsealed and since the Federal Express employees had just examined the package and had, of their own accord, invited the federal agent to their offices for the express purpose of viewing its contents. The agent's viewing of what a private party had freely made available for his inspection did not violate the Fourth Amendment.

Id.

²⁸⁸ *Id.* at 121.

²⁸⁹ *Id.* at 115.

²⁹⁰ *Id.* at 117-18.

This Court has held repeatedly that the Fourth Amendment does not prohibit the obtaining of information revealed to a third party and conveyed by him to Government authorities, even if the information is revealed on the assumption that it will be used only for a limited purpose and the confidence placed in a third party will not be betrayed.

Id. (quoting *United States v. Miller*, 425 U.S. 435, 443 (1976)).

The Fourth Amendment is implicated only if the authorities use information with respect to which the expectation of privacy has not already been frustrated. In such a case the authorities have not relied on what is in effect a private search, and therefore presumptively violate the Fourth Amendment if they act without a warrant.

by Justice Marshall, dissented. He doubted that Jacobsen's privacy had disappeared because it was not clear that the contents of the package were "plainly visible" when the private carrier turned the package over to the police²⁹¹ because a sophisticated surveillance technique was employed.

Drug Sniffing Dogs. The Court had yet another opportunity to apply the REOP test in a novel context when it decided whether police use of drug sniffing dogs to smell suitcases constituted a search. Not uncommonly, these dogs are used at airports or immigration points to determine whether individuals are carrying drugs on their body or in their suitcases or other closed containers (e.g., purses). By using the dogs, the police do not have to open the suitcase to determine whether the suitcase contains drugs. Instead, the dog simply sniffs the outside of the suitcase and alerts if drugs are present within. The question is whether the use of such dogs violates an individual's REOP and therefore constitutes a search within the meaning of the Fourth Amendment.

The Court restrictively applied the REOP test in *United States v. Place*,²⁹² and concluded that a dog sniff of luggage did not constitute a search within the meaning of the Fourth Amendment.²⁹³ Although the Court recognized that an individual has a privacy interest in the contents of luggage,²⁹⁴ the Court found no search because the dog sniff did not involve opening the luggage, did not "expose noncontraband items that otherwise would remain hidden from public view," and was "less intrusive than a typical search."²⁹⁵ Moreover, although the sniff provided the police with information about the contents of luggage, "the information obtained is limited" and does not involve "the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods."²⁹⁶ The

Id.

²⁹¹ *Id.* at 133-43 (Brennan, J., dissenting).

²⁹² 462 U.S. 696 (1983).

²⁹³ *Id.* at 707.

²⁹⁴ *Id.* ("We have affirmed that a person possesses a privacy interest in the contents of personal luggage that is protected by the Fourth Amendment.")

²⁹⁵ *Id.*

²⁹⁶ *Id.*

Court concluded that canine sniffs are sui generis in the sense that the Court was “aware of no other investigative procedure that is so limited both in the manner in which the information is obtained and in the content of the information revealed by the procedure.”²⁹⁷ As a result, the Court held that a canine sniff of luggage does not involve a search within the meaning of the Fourth Amendment.²⁹⁸

Justice Brennan, joined by Justice Marshall, concurred, but expressed reservations about the Court’s conclusions because of the “especially sensitive concerns” raised by the case.²⁹⁹ He noted that a dog “adds a new and previously unobtainable dimension to human perception,” and (in his view) “represents a greater intrusion into an individual’s privacy.”³⁰⁰ In his view, such “use implicates concerns that are at least as sensitive as those implicated by the use of certain electronic detection devices.”³⁰¹

Peering into Automobiles. Can police officers peer into the interior of automobiles without creating a search under the REOP test? This issue arose in *Texas v. Brown*,³⁰² a case in which a police officer viewed vials of illegal drugs during a traffic stop.³⁰³ Noting that the general public could have peered into Brown’s vehicle (for example, had it been parked on a public street), the Court concluded that a police officer should be allowed to do so as well.³⁰⁴ Citing *Katz*, the Court noted that there is “no legitimate expectation of privacy shielding that portion of the interior of an automobile which may be viewed from outside the vehicle by either inquisitive passersby or diligent police officers.”³⁰⁵ As a result, the Court concluded that the

²⁹⁷ *Id.*

²⁹⁸ *Id.*

²⁹⁹ *Id.* at 719.

³⁰⁰ *Id.* at 719-20.

³⁰¹ *Id.*

³⁰² 460 U.S. 730 (1983).

³⁰³ *Id.* at 734.

³⁰⁴ *Id.* at 740.

³⁰⁵ *Id.*

officer did not “search” the vehicle within the meaning of the Fourth Amendment.³⁰⁶

Brown is not a terribly surprising decision because it is consistent with the Court’s general holding that, while individuals have an expectation of privacy in their automobiles,³⁰⁷ this expectation is considered to be limited or “diminished.”³⁰⁸ Moreover, it is doubtful that *Brown* would have been decided any differently under the Court’s pre-*Katz* jurisprudence. Since the officer did not enter the vehicle, and therefore did not enter a constitutionally protected area, there would have been no search under decisions like *Olmstead* and *Goldman*. As a result, under the Court’s pre-*Katz* jurisprudence, as well as under *Katz*’s REOP test, there was no search within the meaning of the Fourth Amendment. The bottom line is that *Brown* was not a “game changer” in terms of the Court’s Fourth Amendment analysis.

In the final analysis, few of the Court’s non-technology post-*Katz* decisions suggested that the Court has construed the REOP test expansively, and those decisions did not lay much of a groundwork for dealing with the problems of advancing technology. In the few instances when the Court had the opportunity to apply the REOP in novel contexts, the Court usually found that the individual had no REOP in that particular situation. Thus, the Court held that the police could search through an individual’s garbage (*Greenwood*),³⁰⁹ that the police could use a canine sniff to ascertain the contents of luggage

³⁰⁶ *Id.*

³⁰⁷ See *New York v. Class*, 475 U.S. 106, 114-15 (1986) (“While the interior of an automobile is not subject to the same expectations of privacy that exist with respect to one’s home, a car’s interior as a whole is nonetheless subject to Fourth Amendment protection from unreasonable intrusions by the police.”).

³⁰⁸ See *id.* at 112-13; *South Dakota v. Opperman*, 428 U.S. 364, 367 (1976) (“Besides the element of mobility, less rigorous warrant requirements govern because the expectation of privacy with respect to one’s automobile is significantly less than that relating to one’s home or office.”); *Cardwell v. Lewis*, 417 U.S. 583, 590 (1974) (plurality opinion) (“One has a lesser expectation of privacy in a motor vehicle because its function is transportation and it seldom serves as one’s residence or as the repository of personal effects. A car has little capacity for escaping public scrutiny. It travels public thoroughfares where both its occupants and its contents are in plain view.”).

³⁰⁹ *California v. Greenwood*, 486 U.S. 35 (1988).

(*Place*),³¹⁰ and that the police could enter property to peer into a barn (*Dunn*).³¹¹ In addition, the Court used the REOP test to deny standing to a passenger in an automobile (*Rakas*),³¹² someone who was visiting an apartment (*Carter*),³¹³ and someone who placed property in another person's purse (*Rawlings*).³¹⁴ Although the Court found a REOP in some post-*Katz* decisions, it was not clear that these cases were significant in the sense that the cases would have been decided differently under the Court's pre-*Katz* jurisprudence.

Some of the Court's post-*Katz* decisions had potentially troubling implications for the individual interest in privacy. For example, the *Place* decision had enormous implications for the use of dogs in other contexts, and raised questions regarding whether the police could take a drug sniffing dog into apartments and condominium buildings and have them sniff at the front doors of apartments or condos. One might argue that the *Place* analysis suggests that the use of drug sniffing dogs is permissible in this context. After all, canine sniffs are sui generis, are limited in manner, and arguably do not involve "the embarrassment and inconvenience entailed in less discriminate and more intrusive investigative methods."³¹⁵ However, it is not clear that the *Place* analysis would apply if a canine sniff is used at an apartment building or condominium. The holding in *Kyllo*, discussed in the following section, suggests why.³¹⁶ However, *Place* also raised questions about whether non-canine technological devices could be used by police or government if they did nothing more than pick up sounds emanating from a house, apartment, car or business.

³¹⁰ United States v. Place, 462 U.S. 696 (1983).

³¹¹ United States v. Dunn, 480 U.S. 294 (1987).

³¹² Rakas v. Illinois, 439 U.S. 128 (1978).

³¹³ Minnesota v. Carter, 525 U.S. 83 (1998).

³¹⁴ Rawlings v. Kentucky, 448 U.S. 98 (1980).

³¹⁵ New York v. Class, 475 U.S. 106, 107 (1986).

³¹⁶ See *infra* pp. 61, 72-76.

IV. *KATZ* AS APPLIED TO ADVANCING TECHNOLOGIES

Although the REOP test was crafted to deal with the problem of advancing technology, the Court has generally not chosen to apply *Katz* expansively when it has been confronted by new forms of technology either.³¹⁷ Indeed, the test seems somewhat ill-suited to deal with the problems of technology. The Court's initial focus under the REOP test was on whether an individual held an "expectation of privacy" against a particular police practice, a test that was later modified to focus on whether there was a REOP against such practices. The difficulty is that, as technology gets better, individual expectations of privacy may become less and less reasonable. Indeed, today, relatively sophisticated listening devices are available that allow the police and neighbors to snoop on others. Moreover, as technology becomes increasingly more sophisticated, and often increasingly cheaper to purchase, does the "reasonableness" of an individual's expectations of privacy gradually disappear? In other words, has the *Katz* test created an inevitable collision between privacy expectations and technology?

The other problem, and one that the Court has not addressed, is whether government may manipulate the citizenry's REOP. Suppose that the government acquires sophisticated

³¹⁷ In a break from decisions like *Olmstead* and *Goldman*, the *Katz* Court purported to shift the focus of Fourth Amendment protections from "places" to persons, in the sense that there had to be an intrusion into a "constitutionally protected area". *Katz v. United States*, 389 U.S. 347, 350-51 (1967). Indeed, the Court stated emphatically that "the Fourth Amendment protects people, not places." *Id.* at 351. The difficulty is that the Court's conclusions simply could not be squared with the literal language of the Fourth Amendment which specifically refers to the protection, not only of people, but also to places (e.g., houses) and, indeed, things (papers and effects). U.S. CONST. amend. IV. As Justice Black noted in his dissent: "The first clause protects 'persons, houses, papers, and effects, against unreasonable searches and seizures' These words connote the idea of tangible things with size, form, and weight, things capable of being searched, seized, or both." *Id.* at 518-19 (Black, J., dissenting). He went on to note that the "second clause of the Amendment still further establishes its Framers' purpose to limit its protection to tangible things by providing that no warrants shall issue but those 'particularly describing the place to be searched, and the persons or things to be seized.'" *Id.* at 519. Of course, to the extent that the Fourth Amendment protects houses, papers and effects, it does so because those things are owned by people who have ownership or possessory interests in those things. Nevertheless, there is explicit protection for places such as homes.

listening devices—devices that are not readily available to the ordinary citizen—and the government announces that it will place such monitoring devices on public property outside of every home in order to monitor all conversations that take place in those houses twenty-four hours a day.³¹⁸ Is it possible for citizens to have a “reasonable expectation of privacy” in their conversations? Would it be permissible to take the less intrusive step of monitoring all public streets with video surveillance cameras? Of course, this general idea (originally conceived (albeit slightly differently) by Professor Anthony Amsterdam³¹⁹) raises the broader question of how courts determine whether an expectation of privacy exists. Even though technology is available, and ordinary people have access to it, the Court could hold that it is unacceptable in a free society for government to use that technology to spy on people. If so, then the Court would be reaffirming the expectations of people, and their sense of what constitutes a “search” within the meaning of the Fourth Amendment.

These unanswered questions left open a number of fundamental questions and issues in the succeeding years and cases, and there was doubt about how the *Katz* test would be applied. For example, is there a violation of a REOP if the police place cameras in public places to monitor what happens there? What if the police attach GPS devices to cars (with or without the owner’s knowledge and consent)? More to the point, what would happen if the police used sophisticated listening devices or x-ray machines to pick up conversations or activities occurring inside a house? *Katz* seemed to suggest (by analogy to the facts in *Katz*) that use of the sophisticated lis-

³¹⁸ See Amsterdam, *supra* note 20, at 349.

³¹⁹ *Id.* Amsterdam suggests that an:

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

Id. at 404.

tening devices of x-ray machines to ascertain conversations or activities inside a house would constitute a search within the meaning of the Fourth Amendment, but would the Court construe the REOP test in that way? In addition, what would happen as technology becomes steadily more advanced, and (as often happens) cheaper and cheaper, and readily available to everyone? For example, suppose that Radio Shack sells inexpensive listening devices that allow individuals to overhear the conversations in their neighbors' yards? Or, even worse, suppose that it sells devices that allow an individual to sit in his own home, but overhear conversations occurring (at normal tones) in neighbors' homes? Will the cheapness and ready availability of this technology undercut the neighbors' expectations of privacy in conversations that take place in their homes and yards? As a result, if the police use such technology from the street to overhear what is being said inside a house or in a backyard, is there no longer a REOP in the house or the backyard? Alternatively, will the Court hold that the use of such technology—by either the neighbors or the police—offends fundamental notions of decency, or at least violates a REOP? After all, the Court has shown a greater tendency to be protective of the home (if not the backyard),³²⁰ and might be protective of the home as it was in *Kyllo* (discussed below).³²¹ However, even *Kyllo* suggested that technology might not be proscribed to the police if it were cheap and readily available to everyone else.

In the Court's post-*Katz* decisions, the Court has not provided individuals with much protection against the onslaught of advancing technology. However, there are a few encouraging decisions, and some encouraging statements from the Court. On balance, however, the Court's post-*Katz* technology decisions reveal many of the problems and difficulties that existed with the Court's pre-*Katz* precedent, and the Court's post-*Katz* non-technology decisions continue to struggle with many of the issues debated by the Court in *Olmstead*, *Goldman* and *Silverman*.

³²⁰ See *Kyllo v. United States*, 533 U.S. 27 (2001).

³²¹ See *infra* pp. 61, 72-76.

Flashlights. As a general rule, the Court has been reluctant (with some exceptions) to hold that police use of technology constitutes a search when the police do not intrude into a constitutionally protected area. Indeed, if the police use technology merely as a form of sense enhancement, the use of that technology has generally been upheld. For example, in the plurality decision in *Texas v. Brown*,³²² a police officer shined a flashlight into a car during an ordinary traffic stop in order to better see vials of illegal drugs.³²³ Although the case focused primarily on application of the plain view doctrine, and the issue of whether the officers could seize the drugs, the search issue arose because the officer used the flashlight to help him see inside the car (which he did not enter). The Court concluded that there was no search within the meaning of the Fourth Amendment.³²⁴ The Court regarded the officer's use of

³²² 460 U.S. 730 (1983).

³²³ *Id.* at 733-34. The Court described the facts as follows:

On a summer evening in June, 1979, Tom Maples, an officer of the Fort Worth police force, assisted in setting up a routine driver's license checkpoint on East Allen Street in that city. Shortly before midnight Maples stopped an automobile driven by respondent Brown, who was alone. Standing alongside the driver's window of Brown's car, Maples asked him for his driver's license. At roughly the same time, Maples shined his flashlight into the car and saw Brown withdraw his right hand from his right pants pocket. Caught between the two middle fingers of the hand was an opaque, green party balloon, knotted about one half inch from the tip. Brown let the balloon fall to the seat beside his leg, and then reached across the passenger seat and opened the glove compartment.

Because of his previous experience in arrests for drug offenses, Maples testified that he was aware that narcotics frequently were packaged in balloons like the one in Brown's hand. When he saw the balloon, Maples shifted his position in order to obtain a better view of the interior of the glove compartment. He noticed that it contained several small plastic vials, quantities of loose white powder, and an open bag of party balloons. After rummaging briefly through the glove compartment, Brown told Maples that he had no driver's license in his possession. Maples then instructed him to get out of the car and stand at its rear. Brown complied, and, before following him to the rear of the car, Maples reached into the car and picked up the green balloon; there seemed to be a sort of powdery substance within the tied-off portion of the balloon.

Id.

³²⁴ *Id.* at 740 (in particular, the Court stated that the officer's actions "trenched upon no right secured to the latter by the Fourth Amendment.").

the flashlight as no different than the use of ordinary field binoculars, and concluded that “the use of artificial means to illuminate a darkened area simply does not constitute a search, and thus triggers no Fourth Amendment protection.”³²⁵ There were no dissents on this issue.

While the *Brown* decision does not reflect an expansive view of the REOP test, it is not terribly illuminating either. Under the Court’s pre-*Katz* precedent, the Court would have been disinclined to find a search on such facts anyway. Although *Brown* reaches the same result, it offers the not terribly surprising conclusion that the use of flashlight technology does not impose any special burden on a suspect’s REOP, and therefore is permissible. Although the Court could have established limits on the use of technology in *Brown*, its decision not to do so is understandable.

Information Voluntarily Conveyed to a Third Party. A more troubling decision is the holding in *Smith v. Maryland*,³²⁶ in which the police used a pen register to record the numbers dialed from Smith’s home phone.³²⁷ The pen register is a device, in this case installed by the phone company at its central offices, that can record the phone numbers dialed from a phone,³²⁸ but which does not record the contents of the telephone conversations themselves.³²⁹ Smith argued that he had a REOP in the

³²⁵ *Id.*

³²⁶ 442 U.S. 735 (1979).

³²⁷ *Id.* at 737. Smith was suspected of having committed a robbery, and the police had traced his license plate number to him. The pen register was installed in an effort to obtain additional information. *Id.*

³²⁸ *Id.* The Court described a pen register as follows: “A pen register is a mechanical device that records the numbers dialed on a telephone by monitoring the electrical impulses caused when the dial on the telephone is released. It does not overhear oral communications and does not indicate whether calls are actually completed.” *Id.* at 736 n.1 (quoting *United States v. N.Y. Tel. Co.*, 434 U.S. 159, 161 n.1 (1977)). The device is installed at a central location at the phone company, and generates a written record of all phone numbers called from the phone being surveilled. *Id.*

³²⁹ *Id.* at 741.

[A] law enforcement official could not even determine from the use of a pen register whether a communication existed. These devices do not hear sound. They disclose only the telephone numbers that have been dialed—a means of establishing communication. Neither the purport of any communication be-

phone numbers because he dialed them from the privacy of his home, and he contended that a reasonable person would expect privacy in the contents of the numbers dialed. Applying the *Katz* test,³³⁰ the Court disagreed, emphasizing that people realize that the phone company has the capacity to record the numbers they call,³³¹ that it exercises that capability when it records the numbers called for long distance billing purposes,³³² and that the phone company also uses its call records to help protect customers against unwelcome or harassing phone calls.³³³ As a result, the Court concluded that telephone users do not have a REOP in the telephone numbers that they dial.³³⁴ The troubling aspect of the decision was that the Court went on

tween the caller and the recipient of the call, their identities, nor whether the call was even completed is disclosed by pen registers.

Id.

³³⁰ *Id.*

Petitioner's claim, rather, is that, notwithstanding the absence of a trespass, the State, as did the Government in *Katz*, infringed a "legitimate expectation of privacy" that petitioner held. Yet a pen register differs significantly from the listening device employed in *Katz*, for pen registers do not acquire the contents of communications.

Id.

³³¹ *Id.* at 742.

³³² *Id.*

[We] doubt that people in general entertain any actual expectation of privacy in the numbers they dial. All telephone users realize that they must "convey" phone numbers to the telephone company, since it is through telephone company switching equipment that their calls are completed. All subscribers realize, moreover, that the phone company has facilities for making permanent records of the numbers they dial, for they see a list of their long-distance (toll) calls on their monthly bills. In fact, pen registers and similar devices are routinely used by telephone companies "for the purposes of checking billing operations, detecting fraud and preventing violations of law." Electronic equipment is used not only to keep billing records of toll calls, but also "to keep a record of all calls dialed from a telephone which is subject to a special rate structure."

Id. (citations omitted).

³³³ *Id.* at 742-43 ("Most phone books tell subscribers, on a page entitled 'Consumer Information,' that the company 'can frequently help in identifying to the authorities the origin of unwelcome and troublesome calls.'") (internal citation omitted).

³³⁴ *Id.* at 743 ("Although subjective expectations cannot be scientifically gauged, it is too much to believe that telephone subscribers, under these circumstances, harbor any general expectation that the numbers they dial will remain secret.").

to voice the sweeping generalization that an individual has “no legitimate expectation of privacy” that he “voluntarily turns over to third parties,”³³⁵ including information turned over to the company’s mechanical equipment.³³⁶

Smith sparked considerable debate between the Justices regarding the meaning of the REOP concept, and the debate was similar to the debates that occurred in the Court’s pre-*Katz* jurisprudence. For example, Justice Stewart, dissenting, found it difficult to reconcile the decision with the holding in *Katz* (that a conversation was protected even though it went

³³⁵ *Id.* at 744.

When he used his phone, petitioner voluntarily conveyed numerical information to the telephone company and “exposed” that information to its equipment in the ordinary course of business. In so doing, petitioner assumed the risk that the company would reveal to police the numbers he dialed. The switching equipment that processed those numbers is merely the modern counterpart of the operator who, in an earlier day, personally completed calls for the subscriber. Petitioner concedes that if he had placed his calls through an operator, he could claim no legitimate expectation of privacy.

Id.

³³⁶ *Id.* at 745.

Petitioner argues, however, that automatic switching equipment differs from a live operator in one pertinent respect. An operator, in theory at least, is capable of remembering every number that is conveyed to him by callers. Electronic equipment, by contrast can “remember” only those numbers it is programmed to record, and telephone companies, in view of their present billing practices, usually do not record local calls. Since petitioner, in calling McDonough, was making a local call, his expectation of privacy as to her number, on this theory, would be “legitimate.” This argument does not withstand scrutiny. The fortuity of whether or not the phone company in fact elects to make a quasi-permanent record of a particular number dialed does not in our view, make any constitutional difference. Regardless of the phone company’s election, petitioner voluntarily conveyed to it information that it had facilities for recording and that it was free to record. In these circumstances, petitioner assumed the risk that the information would be divulged to police. Under petitioner’s theory, Fourth Amendment protection would exist, or not, depending on how the telephone company chose to define local-dialing zones, and depending on how it chose to bill its customers for local calls. Calls placed across town, or dialed directly, would be protected; calls placed across the river, or dialed with operator assistance, might not be. We are not inclined to make a crazy quilt of the Fourth Amendment, especially in circumstances where (as here) the pattern of protection would be dictated by billing practices of a private corporation.

Id.

through the same third party, the phone company), and he argued that Smith was in a comparable position to Katz (if not in a position even more deserving of protection) because he made his calls from a phone in his own home.³³⁷ Smith had no choice but to convey the phone numbers to the phone company,³³⁸ if he wanted to use his phone, and Justice Stewart speculated that not many people would be happy to know that the numbers they dial (and thereby send to the phone company) have no constitutional protection against searches and seizures, especially given that such calls might reveal the intimate details of the individual's life.³³⁹

³³⁷ *Id.* at 746 (Stewart, J., dissenting).

In *Katz v. United States*, the Court acknowledged the "vital role that the public telephone has come to play in private communication[s]." The role played by a private telephone is even more vital, and since *Katz* it has been abundantly clear that telephone conversations carried on by people in their homes or offices are fully protected by the Fourth and Fourteenth Amendments.

Id. (Stewart, J., dissenting) (citations omitted).

³³⁸ *Id.* at 746-47.

A telephone call simply cannot be made without the use of telephone company property and without payment to the company for the service. The telephone conversation itself must be electronically transmitted by telephone company equipment, and may be recorded or overheard by the use of other company equipment. Yet we have squarely held that the user of even a public telephone is entitled "to assume that the words he utters into the mouthpiece will not be broadcast to the world."

Id. (quoting *Katz v. United States*, 389 U.S. 347, 352 (1967)).

³³⁹ *Id.* at 748.

I doubt there are any who would be happy to have broadcast to the world a list of the local or long distance numbers they have called. This is not because such a list might in some sense be incriminating, but because it easily could reveal the identities of the persons and the places called, and thus reveal the most intimate details of a person's life.

Id. (Stewart, J., dissenting); see also Gerald G. Ashdown, *The Fourth Amendment and the "Legitimate Expectation of Privacy,"* 34 VAND. L. REV. 1289, 1314 (1981).

Indeed, it would seem that the only sensible conclusion to be drawn in these cases is that a bank customer should enjoy a reasonable expectation of privacy in the confidential financial information that he discloses to his bank. Thus, the Court's holding in *Miller* can only be indicative of an attempt to emasculate the *Katz* privacy formula in the interest of lessening judicial supervision over law enforcement activities.

Id.

Justice Marshall also dissented, arguing that people expect privacy, not only in the contents of their telephone conversations, but also regarding the phone numbers that they dial.³⁴⁰ Even if individuals disclose those numbers to the phone company for a limited purpose (e.g., to make phone calls), people do not expect that this information will be released to other persons for other reasons, and they certainly do not contemplate that they are releasing the information for general distribution to the public.³⁴¹ Moreover, when people make phone communications, they had little choice (at that time anyway) but to use that mode of communication, and therefore he argued that they did not assume the risk that the information will be made public.³⁴²

The interesting thing about the Marshall dissent is that he urged the Court to consider a redefinition of the *Katz* test. In his view, the test should focus “not on the risks an individual can be presumed to accept when imparting information to third parties, but on the risks he should be forced to assume in a free and open society.”³⁴³ He argued that citizens should not be required to assume the risk that the numbers they dial will be turned over to authorities considering the “intrinsic character” of the investigative practice, the “basic values underlying the

³⁴⁰ *Smith*, 442 U.S. at 748-49 (Marshall, J., dissenting) (“[E]ven assuming, as I do not, that individuals ‘typically know’ that a phone company monitors calls for internal reasons [] it does not follow that they expect this information to be made available to the public in general or the government in particular.”).

³⁴¹ *Id.* at 749-50.

Implicit in the concept of assumption of risk is some notion of choice. At least in the third-party consensual surveillance cases, which first incorporated risk analysis into Fourth Amendment doctrine, the defendant presumably had exercised some discretion in deciding who should enjoy his confidential communications.

Id.

³⁴² *Id.* at 750.

By contrast here, unless a person is prepared to forgo use of what for many has become a personal or professional necessity, he cannot help but accept the risk of surveillance It is idle to speak of ‘assuming’ risks in contexts where, as a practical matter, individuals have no realistic alternative.

Id.

³⁴³ *Id.*

Fourth Amendment,” and the fact that such intrusions “significantly jeopardize [an individual’s] sense of security.”³⁴⁴ He emphasized that telephonic communications play a vital role in life,³⁴⁵ and he argued that the prospect of government monitoring of conversations may be disturbing to “members of unpopular political organizations or journalists with confidential sources” who “may legitimately wish to avoid disclosure of their personal contacts,”³⁴⁶ and, therefore, that the decision may have a negative effect on certain forms of political association.³⁴⁷ In addition, he saw no difference between the facts in *Smith* and the facts in *Katz*.³⁴⁸

Smith is hardly the only decision in which the Court has held that an individual does not hold an expectation of privacy in information turned over to a third party. For example, in *United States v. Miller*,³⁴⁹ the Court held that copies of checks and other bank records turned over to a bank were not accompanied by a REOP, especially since a federal law (Bank Secrecy Act of 1970) required that the records be kept.³⁵⁰ *Miller* provided a clear opportunity for the Court to show that *Katz* had altered the Court’s Fourth Amendment jurisprudence. Nevertheless, *Miller* rejected the Fourth Amendment claim noting “that there was no intrusion into any area in which respondent had a protected Fourth Amendment interest,”³⁵¹ and holding that Miller could not assert either ownership or possession over the papers because the bank kept those records pursuant to its statutory obligations.³⁵² Moreover, the Court concluded that, because of the Act, the “depositor takes the risk, in revealing

³⁴⁴ *Id.* at 751.

³⁴⁵ *Id.*

³⁴⁶ *Id.*

³⁴⁷ *Id.*

³⁴⁸ *Id.* at 752 (quoting *Katz v. United States*, 389 U.S. 347, 352 (1967) (“Just as one who enters a public telephone booth is ‘entitled to assume that the words he utters into the mouthpiece will not be broadcast to the world,’ . . . so too, he should be entitled to assume that the numbers he dials in the privacy of his home will be recorded, if at all, solely for the phone company’s business purposes.”)).

³⁴⁹ 425 U.S. 435 (1976).

³⁵⁰ *Id.* at 442-43.

³⁵¹ *Id.* at 440.

³⁵² *Id.* at 442.

his affairs to another, that the information will be conveyed by that person to the Government.”³⁵³ Justice Brennan dissented arguing that Miller had a legitimate expectation of privacy in the copies of his checks and other records held by his bank.³⁵⁴

Miller was followed by the holding in *Couch v. United States*,³⁵⁵ a case that involved a summons issued to Couch’s accountant for the production of documents, including “books, records, bank statements, cancelled checks, deposit ticket copies, workpapers and all other pertinent documents pertaining to the tax liability of the above taxpayer.”³⁵⁶ Although the case focused primarily on whether Couch could assert her Fifth Amendment privilege against self-incrimination, the case also involved Fourth Amendment claims. In particular, Couch attempted to rely on an alleged “accountant-client relationship” to establish a REOP in documents held by the accountant on her behalf.³⁵⁷ The Court rejected the idea of a confidential accountant-client privilege, and held that “there can be little expectation of privacy where records are handed to an accountant, knowing that mandatory disclosure of much of the information therein is required in an income tax return.”³⁵⁸ Like *Miller*, *Couch* provided the Court with an opportunity to clearly establish that its Fourth Amendment jurisprudence had changed. As with bank records, when one turns records over to an accountant, one assumes that they will be used for a limited purpose, and not disclosed generally to the public, and therefore arguably maintains an expectation of privacy in the records. The Court did not adopt that approach.

Pushed to their logical extremes, decisions like *Smith*, *Miller* and *Couch* raise troubling questions regarding the meaning of the REOP test. In a modern society, many items of personal information are voluntarily conveyed to third parties. In addition to phone calls, most people send e-mails through Internet

³⁵³ *Id.*

³⁵⁴ *Id.* at 448.

³⁵⁵ 409 U.S. 322 (1973).

³⁵⁶ *Id.* at 323.

³⁵⁷ *Id.* at 335.

³⁵⁸ *Id.*

service providers (ISPs), and some even maintain their computer data on sites maintained by others (so-called “cloud computing”).³⁵⁹ The advantage of cloud computing is that users are not tied to their computers (whether at business or at home), and therefore can access their data anywhere in the world. Most commentators would be inclined to think that there is a REOP in e-mail stored on ISPs and data stored on clouds.³⁶⁰ The difficulty is that, since the information stored on the cloud is conveyed to a third party (the owner of the cloud) for storage, *Smith*, *Miller* and *Couch* might suggest that the information is not protected against governmental prying. Indeed, if strictly applied, *Smith* may suggest that even the *Katz* decision is no longer good law. As more than one of the dissenting *Smith* Justices noted, *Katz* used the same third party to convey his information as *Smith* had used. As a result, if one really cannot claim a REOP for information voluntarily conveyed to a third party, then the conversation might not have a REOP either unless one distinguishes the two situations (as will be discussed more fully below).

Is it possible that such actions (phone calls, e-mails and cloud computing) are not protected by a REOP? One would guess not. The Court might distinguish e-mails and cloud computing from the scenarios involved in cases like *Smith*, *Miller* and *Couch* on the basis that the nature of the information conveyed by e-mails and cloud computing is fundamentally different. Even if someone expects the phone company to maintain records of the phone numbers dialed by a customer, for long distance purposes or to prevent harassment, one ordinarily does not expect the phone company to monitor the contents of conversations. Like a letter that one sends through the mail, while it may be possible to determine to whom the letter was addressed, one would think that the contents of the letter are accompanied by an expectation of privacy. Similarly, when one

³⁵⁹ See David A. Couillard, *Defogging the Cloud: Applying Fourth Amendment Principles to Evolving Privacy Expectations in Cloud Computing*, 93 MINN. L. REV. 2205 (2009).

³⁶⁰ See Patricia L. Bellia & Susan Freiwald, *Fourth Amendment Protections for Stored E-Mail*, 2008 U. CHI. LEGAL F. 121.

sends e-mails through an ISP, or maintains data on a “cloud,” one does not expect the ISP or the company that maintains the cloud to monitor the content of the e-mails or the data stored on the cloud. After all, e-mails and clouds are protected by passwords and other security devices that allow only the customer to access the information and prevent the owner of the hardware from accessing it. As a result, one can argue that the content of the information has not been revealed to the third party. However, this only a supposition. The Court’s precedents in *Smith*, *Miller* and *Couch* have never been overruled, and their meaning has not been further defined.

In the final analysis, the *Smith* decision is like many of the Court’s non-technology decisions applying the REOP test (in particular, *Oliver*, *Greenwood* and *Place*). As with those other decisions, the Court does not construe and apply the concept of a REOP expansively, and does not lay the groundwork for dealing with other more advanced forms of technology that may be developed.

Low-Flying Helicopters (and other sophisticated surveillance devices). In several cases, the Court has been asked to resolve the question of whether the police may use yet another form of technology, in particular low-flying helicopters, to spy on properties. This issue is of particular importance to Fourth Amendment jurisprudence because police can combine the helicopter (itself an expensive piece of machinery) with other more sophisticated pieces of electronic equipment such as highly sophisticated binoculars and cameras that allow the user to pick up small details about a distant place. For example, may the police fly a helicopter over a house and use high-tech binoculars to peer down through the skylight of a house or through the windows of the house? Likewise, highly sophisticated satellites have been developed that allow a camera, positioned in outer space, to pick up detail regarding a place on earth. May the police use these various types of technologies to allow them to peer down into houses?

The Court’s rulings regarding the use of helicopters were not reassuring in terms of the meaning and application of the

REOP test and its application to new forms of technology. Illustrative is the holding in *California v. Ciraolo*,³⁶¹ in which police suspected that Ciraolo was growing marijuana in his fenced backyard, but found it difficult to view the property from the ground because it was surrounded by a ten-foot fence.³⁶² Police, therefore, decided to fly a plane about one-thousand feet above the property (which was regarded as “navigable airspace”) in order to confirm their suspicions.³⁶³ From that height, the officers could readily identify marijuana plants eight-to-ten-feet high growing in a fifteen-by-twenty-foot plot in respondent’s yard, took photographs with a standard 35mm camera, and were able to obtain a search warrant, which led to the seizure of seventy-three marijuana plants.³⁶⁴ The Court held that police use of the plane did not constitute a “search” within the meaning of the Fourth Amendment.³⁶⁵ While recognizing that the courts have historically accorded greater protection to the curtilage surrounding a home, and noting that Ciraolo had gone to great lengths to preserve the privacy of his curtilage, thereby manifesting his subjective expectation of privacy,³⁶⁶ the Court held that Ciraolo did not have a REOP because the plane was in navigable airspace, and the marijuana plants could be viewed with the naked eye from that position.³⁶⁷ As a result, Ciraolo’s expectation of privacy was less than that of Katz who placed a call from a phone booth.³⁶⁸

³⁶¹ 476 U.S. 207 (1986).

³⁶² *Id.* at 209.

³⁶³ *Id.*

³⁶⁴ *Id.* at 209-10.

³⁶⁵ *Id.* at 215.

³⁶⁶ *Id.* at 212-13.

At common law, the curtilage is the area to which extends the intimate activity associated with the “sanctity of a man’s home and the privacies of life.” 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. The claimed area here was immediately adjacent to a suburban home, surrounded by high double fences.

Id. (citations omitted).

³⁶⁷ *Id.* at 213-14.

Once again, there was a division within the Court, and disagreement about how the Court should apply the REOP test to technology. Justice Blackmun, dissenting, vigorously disputed the Court's conclusions, arguing that Ciralo (like anyone else) had a REOP in the curtilage of his home.³⁶⁹ Although it was theoretically possible for planes to fly at such low altitudes over a house, the chances of that happening were (in his opinion) "virtually nonexistent."³⁷⁰ Although commercial flights (or other planes) might have flown over Ciralo's property, the reality is that passengers in those planes would have "at most a fleeting, anonymous, and nondiscriminating glimpse of the landscape and buildings over which they pass," and the "risk that a passenger on such a plane might observe private activities, and might connect those activities with particular people, is simply too trivial to protect against."³⁷¹ As a result, Justice Blackman argued that, while many people build fences around

The observations by Officers Shutz and Rodriguez in this case took place within public navigable airspace in a physically nonintrusive manner; from this point they were able to observe plants readily discernible to the naked eye as marijuana. That the observation from aircraft was directed at identifying the plants and the officers were trained to recognize marijuana is irrelevant. Such observation is precisely what a judicial officer needs to provide a basis for a warrant. Any member of the public flying in this airspace who glanced down could have seen everything that these officers observed. On this record, we readily conclude that respondent's expectation that his garden was protected from such observation is unreasonable and is not an expectation that society is prepared to honor.

Id. (internal citation omitted).

³⁶⁸ *Id.* at 214-15.

But Justice Harlan's observations about future electronic developments and the potential for electronic interference with private communications were plainly not aimed at simple visual observations from a public place . . . Justice Harlan made it crystal clear that he was resting on the reality that one who enters a telephone booth is entitled to assume that his conversation is not being intercepted. This does not translate readily into a rule of constitutional dimensions that one who grows illicit drugs in his backyard is "entitled to assume" his unlawful conduct will not be observed by a passing aircraft—or by a power company repair mechanic on a pole overlooking the yard.

Id. (internal citation omitted).

³⁶⁹ *Id.* at 219 (Powell, J., dissenting).

³⁷⁰ *Id.* at 223.

³⁷¹ *Id.* at 223-24.

their property, few feel the need to “build roofs over their backyards” because people do not intend to expose their backyards to aerial surveillance.³⁷² He also expressed concern about the fact that advancing technology might eventually allow police to peer inside of homes, thereby creating an inevitable loss of privacy.³⁷³

The Court rendered a similar decision in *Florida v. Riley*,³⁷⁴ a case in which police flew at an even lower level (four-hundred feet) in order to determine whether a property owner was growing marijuana inside a greenhouse located in a rural area about ten-to-twenty feet from Riley’s mobile home.³⁷⁵ A clear view of the house was obscured from ground level because of the surrounding trees and shrubs, as well as because the greenhouse was covered by corrugated roofing panels, some translucent and some opaque.³⁷⁶ However, “two of the panels on the greenhouse, amounting to approximately ten-percent of the roof area, were missing.”³⁷⁷ “A wire fence surrounded the mobile home and the greenhouse, and the property was posted with a ‘DO NOT ENTER’ sign.”³⁷⁸ By using the helicopter, a police officer was able to observe (with his naked eye) the fact that Riley was growing marijuana in the greenhouse, and then to obtain a search warrant that revealed the presence of marijuana.³⁷⁹

Once again, the Court’s approach to the REOP test did not reflect an expanded view of privacy. Although the Court concluded that Riley had a subjective expectation of privacy in the greenhouse, the Court relied on *Ciraolo* in holding that the expectation was not objectively reasonable since the roof was open and the interior of the greenhouse could be viewed from the air.³⁸⁰ The Court rejected the argument that a flight at 400

³⁷² *California v. Ciraolo*, 476 U.S. 207, 223-24 (1986) (Blackmun J., dissenting).

³⁷³ *Id.* at 226.

³⁷⁴ 488 U.S. 445 (1989).

³⁷⁵ *Id.* at 448.

³⁷⁶ *Id.*

³⁷⁷ *Id.*

³⁷⁸ *Id.*

³⁷⁹ *Id.* at 448-49.

³⁸⁰ *Id.* at 450-51.

feet was more objectionable than a flight at 1,000 feet (as had occurred in *Ciraolo*).³⁸¹

In *Riley*, Justice Brennan, joined by Justices Marshall and Stevens, dissented.³⁸² Brennan would have altered the Court's approach to determining whether a REOP existed, and he would have applied a quite different test in determining whether the Fourth Amendment applied. In particular, he would have asked "whether, if the particular form of surveil-

Riley no doubt intended and expected that his greenhouse would not be open to public inspection, and the precautions he took protected against ground-level observation. Because the sides and roof of his greenhouse were left partially open, however, what was growing in the greenhouse was subject to viewing from the air. Under the holding in *Ciraolo*, Riley could not reasonably have expected the contents of his greenhouse to be immune from examination by an officer seated in a fixed-wing aircraft flying in navigable airspace at an altitude of 1,000 feet or, as the Florida Supreme Court seemed to recognize, at an altitude of 500 feet, the lower limit of the navigable airspace for such an aircraft. Here, the inspection was made from a helicopter, but as is the case with fixed-wing planes, "private and commercial flight [by helicopter] in the public airways is routine" in this country . . . and there is no indication that such flights are unheard of in Pasco County, Florida. Riley could not reasonably have expected that his greenhouse was protected from public or official observation from a helicopter had it been flying within the navigable airspace for fixed-wing aircraft.

Id. (quoting *California v. Ciraolo*, 476 U.S. 207, 215 (1986)).

³⁸¹ *Id.* at 451-52.

But helicopters are not bound by the lower limits of the navigable airspace allowed to other aircraft. Any member of the public could legally have been flying over Riley's property in a helicopter at the altitude of 400 feet and could have observed Riley's greenhouse. The police officer did no more. This is not to say that an inspection of the curtilage of a house from an aircraft will always pass muster under the Fourth Amendment simply because the plane is within the navigable airspace specified by law. But it is of obvious importance that the helicopter in this case was *not* violating the law, and there is nothing in the record or before us to suggest that helicopters flying at 400 feet are sufficiently rare in this country to lend substance to respondent's claim that he reasonably anticipated that his greenhouse would not be subject to observation from that altitude. Neither is there any intimation here that the helicopter interfered with respondent's normal use of the greenhouse or of other parts of the curtilage. As far as this record reveals, no intimate details connected with the use of the home or curtilage were observed, and there was no undue noise, and no wind, dust, or threat of injury. In these circumstances, there was no violation of the Fourth Amendment.

Id. (emphasis in original).

³⁸² *Id.* at 456 (Brennan, J., dissenting).

lance practiced by the police is permitted to go unregulated by constitutional restraints, the amount of privacy and freedom remaining to citizens would be diminished to a compass inconsistent with the aims of a free and open society.”³⁸³ As with the *Ciraolo* dissent, he doubted the Court’s assumption that people routinely fly helicopters at such low heights over houses (or greenhouses) in order to peer into them,³⁸⁴ and he questioned whether Riley’s REOP should have turned on administrative regulations specifying what constitutes navigable air space.³⁸⁵ He emphasized that the police were using a “very expensive and sophisticated piece of machinery” which allowed them to view Riley’s property from a vantage point “to which few ordinary citizens have access,”³⁸⁶ and he expressed concern about “how tightly the Fourth Amendment permits people to be driven back into the recesses of their lives by the risk of surveillance.”³⁸⁷

³⁸³ *Id.* (quoting Amsterdam, *supra* note 20, at 403).

³⁸⁴ *Id.* at 457-58.

Notwithstanding the plurality’s statistics about the number of helicopters registered in this country, can it seriously be questioned that Riley enjoyed virtually complete privacy in his backyard greenhouse, and that that privacy was invaded solely by police helicopter surveillance? Is the theoretical possibility that any member of the public (with sufficient means) could also have hired a helicopter and looked over Riley’s fence of any relevance at all in determining whether Riley suffered a serious loss of privacy and personal security through the police action?

Id.

³⁸⁵ *Id.* at 458-59.

It is a curious notion that the reach of the Fourth Amendment can be so largely defined by administrative regulations issued for purposes of flight safety. It is more curious still that the plurality relies to such an extent on the legality of the officer’s act, when we have consistently refused to equate police violation of the law with infringement of the Fourth Amendment.

Id.

³⁸⁶ *Id.* at 460 (“To say that an invasion of Riley’s privacy from the skies was not impossible is most emphatically not the same as saying that his expectation of privacy within his enclosed curtilage was not ‘one that society is prepared to recognize as reasonable.’”).

³⁸⁷ *Id.* at 466 (quoting Amsterdam, *supra* note 20, at 402). He went on to note that:

The Fourth Amendment demands that we temper our efforts to apprehend criminals with a concern for the impact on our fundamental liberties of the methods we use. I hope it will be a matter of concern to my colleagues that

At this point, it is not clear how far the *Ciraolo* and *Riley* decisions will extend. Since both cases involved the curtilage of a residence, and in only one of the cases (*Riley*) did the police peer into a building, it is not clear whether the Court would allow police to use a helicopter to spy on the interior of a home. However, the language of both opinions was not reassuring on this point. Suppose, to recite an example used earlier, the police use a helicopter to fly low over a house (the 400 feet that was at issue in *Riley*), and they attempt to peer down through skylights or other open windows into a home. Would the Court find that the police had committed a “search” within the meaning of the Fourth Amendment? After all, as in *Ciraolo* and *Riley*, the police would be in navigable air space and would be observing what anyone could see who chose to fly there. As a result, under the logic of *Ciraolo* and *Riley*, it would be difficult to conclude that there was a search within the meaning of the Fourth Amendment. Nevertheless, under the logic of the Court’s subsequent decision in *Kyllo v. United States*,³⁸⁸ in which the Court was extremely protective regarding police attempts to pry into the privacy of a home, the Court might be inclined to find a search. The Court might be particularly inclined to find a search if the police chose to supplement the helicopter by using very powerful and sophisticated cameras or binoculars that enhanced their ability to see into the house. However, the precise outcome of such a case is far from clear.

In the final analysis, as with other post-*Katz* precedent, it is not clear that decisions like *Ciraolo* and *Riley* have interpreted the Fourth Amendment any more broadly than the Court’s other post-*Katz* precedent, or that they establish a

the police surveillance methods they would sanction were among those described 40 years ago in George Orwell’s dread vision of life in the 1980’s:

“The black-mustachio’d face gazed down from every commanding corner. There was one on the house front immediately opposite. BIG BROTHER IS WATCHING YOU, the caption said. . . . In the far distance a helicopter skimmed down between the roofs, hovered for an instant like a bluebottle, and darted away again with a curving flight. It was the Police Patrol, snooping into people’s windows.” *Nineteen Eighty-Four* 4 (1949).

Id.

³⁸⁸ 533 U.S. 27 (2001).

sound framework for addressing issues that arise related to advancing technology. As with flashlights and pen registers, the Court expressed no concerns about the use of helicopters and planes.

Aerial Photography of Industrial Facilities. In another case, *Dow Chemical Company v. United States*,³⁸⁹ the government did in fact supplement a fly-over with photographic equipment. That case involved aerial photography of Dow Chemical's 2,000-acre area chemical manufacturing facility.³⁹⁰ Although the complex could be viewed from the air, Dow had taken elaborate security measures around the perimeter of the complex that barred ground-level public views of the complex, and it took security measures against low-flying aircraft.³⁹¹ However, because the complex was so large, Dow was not able to conceal all exterior manufacturing equipment within the complex from aerial views.³⁹² When Dow refused the Environmental Protection Agency's (EPA) request for permission to inspect the facility, EPA hired a commercial aerial photographer to take pictures of the complex using a standard floor-mounted, precision aerial mapping camera from altitudes of 12,000, 3,000, and 1,200 feet (all of which were regarded as navigable airspace).³⁹³

In *Dow Chemical*, the Court concluded that the aerial photography did not involve a search within the meaning of the Fourth Amendment, in part, because the EPA was using commonly available technology.³⁹⁴ Even though Dow Chemical might have objected under state law had a competitor tried to use aerial photography technology to spy on its industrial processes, the Court emphasized that the EPA was not a competitor.³⁹⁵ Moreover, since the exterior of the plant could be viewed from a plane, or from a nearby hillside overlooking the

³⁸⁹ 476 U.S. 227 (1986).

³⁹⁰ *Id.* at 229.

³⁹¹ *Id.*

³⁹² *Id.*

³⁹³ *Id.*

³⁹⁴ *Id.* at 231.

³⁹⁵ *Id.* at 231-32.

facility,³⁹⁶ the Court concluded that Dow Chemical had no Fourth Amendment claim regarding the exterior of its plant.³⁹⁷ The Court rejected Dow's argument that the government had photographed curtilage, rather than "open fields,"³⁹⁸ and upheld the inspection and photography because it did not involve a physical intrusion into plant buildings.³⁹⁹

Once again, there was a split within the Court about how to define the REOP test, and once again some Justices argued for a more expansive interpretation of that test. This time the opposition was provided by Justice Powell, joined by Justices Brennan, Marshall, and Blackmun, who concurred in part and dissented in part.⁴⁰⁰ Justice Powell noted that the Court's approach to determining whether a REOP exists "will permit the gradual decay" of such rights "as technology advances."⁴⁰¹ In his view, Dow had a REOP regarding the exterior of the facility because Dow had implemented elaborate security measures at the facility,⁴⁰² at a cost of more than \$3.25 million,⁴⁰³ and had taken steps to stop or control aerial photography by competitors.⁴⁰⁴ In addition, he argued that the camera used by the EPA involved extremely sophisticated technology, which allowed photos to be enlarged "to a scale of 1 inch equals 20 feet *or greater*, without significant loss of detail or resolution," and allowed (with magnification) observation of pipes, etc., that were "as small as ½ inch in diameter."⁴⁰⁵ Indeed, the camera used by the EPA's photographer cost more than \$22,000.⁴⁰⁶

³⁹⁶ *Id.* at 234.

³⁹⁷ *Id.* at 239.

³⁹⁸ *Id.* at 235 ("The intimate activities associated with family privacy and the home and its curtilage simply do not reach the outdoor areas or spaces between structures and buildings of a manufacturing plant.").

³⁹⁹ *Id.* at 237-38 ("Any actual physical entry by EPA into any enclosed area would raise significantly different questions, because '[t]he businessman, like the occupant of a residence, has a constitutional right to go about his business free from unreasonable official entries upon his private commercial property.'").

⁴⁰⁰ *Id.* at 240.

⁴⁰¹ *Id.* (Powell, J., dissenting in part).

⁴⁰² *Id.* at 241.

⁴⁰³ *Id.* at 241 n.2.

⁴⁰⁴ *Id.* at 241-42.

⁴⁰⁵ *Id.* at 243.

⁴⁰⁶ *Id.* at 243 n.4.

Since the camera penetrated into a private enclave, and captured far more than the naked eye could see, Justice Powell concluded that Dow had a REOP because the “photographs captured highly confidential information that Dow had taken reasonable and objective steps to preserve as private.”⁴⁰⁷

The actual holding in *Dow Chemical* was not reassuring regarding the meaning of the REOP test, or regarding that test’s application to advancing technology. The Court held that the police could augment their fly-overs (as in *Ciraolo* and *Riley*) with camera technology (and, presumably, could have augmented it with high-powered binoculars). If the decision is extended to other contexts, the police (or other governmental officials) might have the capacity to peer down into houses and otherwise private spaces. However, in dicta, the Court did offer some encouragement for future uses of sophisticated technology by suggesting that it would have viewed the use of aerial photography much more negatively if the EPA had used “some unique sensory device that, for example, could penetrate the walls of buildings and record conversations in Dow’s plants, offices, or laboratories,” rather than using what the Court referred to as “a conventional, albeit precise, commercial camera commonly used in mapmaking.”⁴⁰⁸ In addition, the Court suggested that it might have had greater reservations had the government tried to use “highly sophisticated surveillance equipment not generally available to the public, such as satellite technology,” but the Court emphasized that the technology that was actually used was “not so revealing of intimate details as to raise constitutional concerns” even though the EPA obtained more information than could have been obtained simply by technology, which undoubtedly gave the EPA more information than its employees could have obtained with their naked-eye.⁴⁰⁹ The Court did express reservations about allowing the government to use sophisticated electronic devices that would allow them “to penetrate walls or windows so as to hear and record confidential discussions of chemical formulae or other

⁴⁰⁷ *Id.* at 252.

⁴⁰⁸ *Id.* at 238 (majority opinion).

⁴⁰⁹ *Id.*

trade secrets,” and suggested that the use of such technologies “would raise very different and far more serious questions.”⁴¹⁰ This dicta suggests that the Court might respond more negatively if the government attempted to use sophisticated spy satellites, or fly-overs coupled with high-powered binoculars or observation equipment to peer into people’s homes.

Radio Transmitters and Other Electronic Listening Devices. Of course, the *Katz* case itself involved an electronic listening device, and the Court found a REOP in that case. However, in other cases, the Court has generally refused to find a REOP when the police have used electronic devices to monitor conversations. Illustrative is the plurality opinion in *United States v. White*,⁴¹¹ a case in which a government informant engaged White in conversation in the informant’s home. Police agents were able to overhear the conversation because the informant used a radio transmitter and the police were nearby with radio receivers.⁴¹² The Court noted that, under its prior holdings in *Olmstead*⁴¹³ and *Goldman*,⁴¹⁴ there would have been no search because there had been no “actual physical invasion of his house or curtilage” surrounding it.⁴¹⁵ Under the REOP test, the Court found no violation of White’s REOP since the informant could have written down what White said to him,⁴¹⁶ and the Court held that it made no difference that the informant was carrying electronic equipment that allowed the content of the conversation to be electronically transmitted to the police.⁴¹⁷

⁴¹⁰ *Id.* at 239.

⁴¹¹ 401 U.S. 745 (1971).

⁴¹² *Id.* at 746-47.

⁴¹³ *Olmstead v. United States*, 227 U.S. 438 (1928).

⁴¹⁴ *Goldman v. United States*, 316 U.S. 129 (1942).

⁴¹⁵ *White*, 401 U.S. at 748.

⁴¹⁶ *Id.* at 751.

⁴¹⁷ *Id.*

If the conduct and revelations of an agent operating without electronic equipment do not invade the defendant’s constitutionally justifiable expectations of privacy, neither does a simultaneous recording of the same conversations made by the agent or by others from transmissions received from the agent to whom the defendant is talking and whose trustworthiness the defendant necessarily risks.

Id.

Although a determination of White's REOP would not include the individual's expectations (and the fact that he would not have spoken to the informant if he realized that the informant was working with the police), but instead rely on societal expectations of reasonableness.⁴¹⁸ Consideration of these societal expectations would involve analysis of the fact that an informant could frustrate an accomplice's expectations of privacy by cooperating with the police, thereby rendering the individual's expectations unreasonable.⁴¹⁹ The Court concluded that it mattered not whether the informant spoke directly to the police, or whether he recorded or transmitted the conversations to the police.⁴²⁰

Again, there was disagreement within the Court about the meaning of the REOP test, and disagreement about how it should apply to technology. This time, the argument was made by Justice Douglas, dissenting, who argued that electronic surveillance "is the greatest leveler of human privacy ever known."⁴²¹ He went on to note:

But every person is the victim, for the technology we exalt today is everyman's master. Any doubters should read Arthur R. Miller's *The Assault on Privacy* (1971). After describing the monitoring of conversations and their storage in data banks, Professor Miller goes on to describe "human monitoring" which he calls the "ultimate step in mechanical snooping"—a device for spotting unorthodox or aberrational behavior across

⁴¹⁸ *Id.* at 751-52.

Our problem is not what the privacy expectations of particular defendants in particular situations may be or the extent to which they may in fact have relied on the discretion of their companions. Very probably, individual defendants neither know nor suspect that their colleagues have gone or will go to the police or are carrying recorders or transmitters. Otherwise, conversation would cease and our problem with these encounters would be nonexistent or far different from those now before us. Our problem, in terms of the principles announced in *Katz*, is what expectations of privacy are constitutionally "justifiable"—what expectations the Fourth Amendment will protect in the absence of a warrant.

Id.

⁴¹⁹ *Id.*

⁴²⁰ *Id.*

⁴²¹ *Id.* at 756.

a wide spectrum. "Given the advancing state of both the remote sensing art and the capacity of computers to handle an uninterrupted and synoptic data flow, there seem to be no physical barriers left to shield us from intrusion."⁴²²

In his view, electronic "aids add a wholly new dimension to eavesdropping. They make it more penetrating, more indiscriminate, more truly obnoxious to a free society," because they make "police omniscient; and police omniscience is one of the most effective tools of tyranny."⁴²³ He then raised the specter of whether technological advancements would force everyone to "live in fear that every word he speaks may be transmitted or recorded and later repeated to the entire world?"⁴²⁴ He concluded with the observation that "I can imagine nothing that has a more chilling effect on people speaking their minds and expressing their views on important matters. The advocates of that regime should spend some time in totalitarian countries and learn firsthand the kind of regime they are creating here."⁴²⁵

Electronic Beepers. The Court has also rendered several decisions in cases involving the use of electronic beepers to track a suspect's movement, and once again the Court's application of the REOP test revealed mixed results for the protection of privacy interests. Electronic beepers have significant potential to invade individual privacy by allowing police to track the movements and actions of individuals, and the question is whether police monitoring of beepers constitutes a "search" within the meaning of the Fourth Amendment. The answer to that question has important consequences. If the use of a beeper does not involve a search, then the police might use beepers or other GPS systems to track the movements of various individuals in society. There have also been questions regarding whether the police can surreptitiously install GPS de-

⁴²² *Id.* at 757.

⁴²³ *Id.* at 759-60 (quoting *Lopez v. United States*, 373 U.S. 427, 465-66 (1963) (Brennan J., dissenting)).

⁴²⁴ *Id.* at 764.

⁴²⁵ *Id.* at 764-65.

VICES or beepers on vehicles and then monitor the movements of those vehicles.

The Court's initial decision, in *United States v. Knotts*,⁴²⁶ held that police may monitor a beeper (placed in a bottle of chloroform) in an effort to determine where Knotts was traveling, without committing a search.⁴²⁷ Knotts argued that police use of the beeper constituted a "search" because the police had obtained information from the beeper—in particular, the location of a remote cabin where Knotts was manufacturing drugs—that they could not have easily obtained otherwise.⁴²⁸ The Court disagreed, noting that an individual has a lesser expectation of privacy in an automobile,⁴²⁹ that Knotts was traveling on a public highway, and that the beeper simply allowed the government to monitor things that the police could have observed from the highway with their own eyes.⁴³⁰ In other words, had the police been on the street, they could have seen Knotts driving from the city to his remote cabin. Although the Court concluded that Knotts had an expectation of privacy in the interior of his cabin (which was not infringed),⁴³¹ he could not claim a REOP for his drive to the cabin.⁴³²

⁴²⁶ 460 U.S. 276 (1983).

⁴²⁷ *Id.* at 277, 285.

⁴²⁸ *Id.* at 284.

⁴²⁹ *Id.* at 281.

One has a lesser expectation of privacy in a motor vehicle because its function is transportation and it seldom serves as one's residence or as the repository of personal effects. A car has little capacity for escaping public scrutiny. It travels public thoroughfares where both its occupants and its contents are in plain view.

Id. (citing *Cardwell v. Lewis*, 417 U.S. 583, 590 (1974) (plurality)).

⁴³⁰ *Id.* at 281-82.

A person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another. When Petschen traveled over the public streets he voluntarily conveyed to anyone who wanted to look the fact that he was traveling over particular roads in a particular direction, the fact of whatever stops he made, and the fact of his final destination when he exited from public roads onto private property.

Id.

⁴³¹ *Id.* at 285.

A police car following Petschen at a distance throughout his journey could have observed him leaving the public highway and arriving at the cabin

While the Court's reasoning was technically correct, in that the police could have observed Knotts as he traveled on public streets to get to his cabin, the Court completely ignored the realities of the situation. Knotts, aware that he was manufacturing illegal drugs at the remote cabin, and also aware that he was purchasing chemicals to use in that operation, might have had a heightened sense of awareness regarding the possibility that he was being watched or surveilled during his drive from the store to the cabin. In other words, had the police tried to tail Knotts after he made the purchase, and had he figured out that he was being tailed, he would not have gone to the cabin. Likewise, although the police could have posted monitors along the route to the cabin, they could only have done so if they had been able to obtain good information regarding the location of the cabin, and the route that Knotts might take. Otherwise, it is doubtful that the spotters could have helped the police actually ascertain the cabin's whereabouts. In other words, despite the Court's assertions, the beeper provided the police with the only viable means to monitor Knott's route and destination, but the Court concluded that use of the beeper did not constitute a search, and therefore that the Fourth Amendment was inapplicable.

In *Knotts*, there were the usual disagreements within the Court about the meaning and application of the REOP test and its application to technology. This time Justice Stevens, joined by Justices Brennan and Marshall, concurring, raised concerns about advances in technology, the implications of those advances for individual privacy, and the ongoing validity of the

owned by respondent, with the drum of chloroform still in the car. This fact, along with others, was used by the government in obtaining a search warrant which led to the discovery of the clandestine drug laboratory. But there is no indication that the beeper was used in any way to reveal information as to the movement of the drum within the cabin, or in any way that would not have been visible to the naked eye from outside the cabin.

Id.

⁴³² *Id.* at 282 ("But no such expectation of privacy extended to the visual observation of Petschen's automobile arriving on his premises after leaving a public highway, nor to movements of objects such as the drum of chloroform outside the cabin in the 'open fields.'").

Katz decision.⁴³³ In *Knotts*, the Court suggested that the Fourth Amendment does not prohibit the police from augmenting their sensory facilities with technology. However, Stevens noted that the *Katz* decision suggested that the use of electronic surveillance techniques might “implicate especially sensitive concerns.”⁴³⁴

Although the *Knotts* Court sustained the police in the use of a technological device, the Court offered some small comforts regarding the possible encroachments of advancing technology and the possibility that governmental use of sophisticated technologies might eventually become so pervasive that the government could maintain twenty-four-hour-a-day surveillance of both people and public places.⁴³⁵ In that case, *Knotts* argued that, if the police could monitor the beeper without implicating the Fourth Amendment, then “twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision.”⁴³⁶ In rejecting this concern, the Court concluded that “if such dragnet type law enforcement practices as respondent envisions should eventually occur, there will be time enough then to determine whether different constitutional principles may be applicable.”⁴³⁷

Knotts was followed by the holding in *United States v. Karo*,⁴³⁸ another case that involved police use of an electronic beeper, but there was a critical difference between *Knotts* and *Karo*. In *Karo*, although the police again monitored the beeper to learn the whereabouts of a remote cabin, they continued to monitor the beeper even after it arrived at the cabin.⁴³⁹ As a result, they were able to ascertain how long *Karo* kept it there, when he moved it, and where he took it.⁴⁴⁰ In line with the *Knott*’s decision, the Court held that installation of the beeper into the chemical product did not invade *Karo*’s Fourth

⁴³³ *Id.* at 285-86.

⁴³⁴ *Id.* at 287 (Stevens, J., concurring).

⁴³⁵ *Id.* at 283.

⁴³⁶ *Id.*

⁴³⁷ *Id.* at 284.

⁴³⁸ 468 U.S. 705 (1984).

⁴³⁹ *Id.* at 708.

⁴⁴⁰ *Id.*

Amendment rights,⁴⁴¹ and that police monitoring of the beeper did not involve a search within the meaning of the Fourth Amendment.⁴⁴² Nevertheless, the Court concluded that the police had violated Karo's REOP by continuing to monitor the beeper once it entered the house. By doing so, they learned information about the interior of the house (specifically, how long the beeper remained there), and therefore there was a search within the meaning of the Fourth Amendment.⁴⁴³ In a theme that has emerged in more recent decisions, the Court focused on the fact that police had intruded on the privacy of Karo's home, emphasized the importance attributed to homes under the Fourth Amendment,⁴⁴⁴ and found it offensive that the government had used the beeper to obtain information regarding the interior of the home.⁴⁴⁵ As a result, the police used the bee-

⁴⁴¹ *Id.* at 711.

It is clear that the actual placement of the beeper into the can violated no one's Fourth Amendment rights. The can into which the beeper was placed belonged at the time to the DEA, and by no stretch of the imagination could it be said that respondents then had any legitimate expectation of privacy in it. The ether and the original 10 cans, on the other hand, belonged to, and were in the possession of, Muehlenweg [the individual from whom Karo purchased them], who had given his consent to any invasion of those items that occurred. Thus, even if there had been no substitution of cans and the agents had placed the beeper into one of the original 10 cans, Muehlenweg's consent was sufficient to validate the placement of the beeper in the can.

Id.

⁴⁴² *Id.* at 713.

⁴⁴³ *Id.* at 715-17.

⁴⁴⁴ *Id.* at 714-15.

At the risk of belaboring the obvious, private residences are places in which the individual normally expects privacy free of governmental intrusion not authorized by a warrant, and that expectation is plainly one that society is prepared to recognize as justifiable. Our cases have not deviated from this basic Fourth Amendment principle. Searches and seizures inside a home without a warrant are presumptively unreasonable absent exigent circumstances.

Id.

⁴⁴⁵ *Id.* at 715.

In this case, had a DEA agent thought it useful to enter the Taos residence to verify that the ether was actually in the house and had he done so surreptitiously and without a warrant, there is little doubt that he would have engaged in an unreasonable search within the meaning of the Fourth Amendment. For purposes of the Amendment, the result is the same where, without

per to learn more than they could have learned simply from observing from public streets, and the Court held that the police had committed a search within the meaning of the Fourth Amendment.⁴⁴⁶

Again, there was a schism within the Court regarding the meaning of the REOP test and how the test should be applied. This time, Justice Stevens made the dissenting argument, joined by Justices Brennan and Marshall. He argued that police use of the beeper constituted both a search and seizure under the Fourth Amendment because attachment of the beeper interfered with the property owner's possessory rights,⁴⁴⁷ as well as because it amounted to the government exercising "dominion" and "control" (which he regarded as a "seizure").⁴⁴⁸

a warrant, the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house. The beeper tells the agent that a particular article is actually located at a particular time in the private residence and is in the possession of the person or persons whose residence is being watched. Even if visual surveillance has revealed that the article to which the beeper is attached has entered the house, the later monitoring not only verifies the officers' observations but also establishes that the article remains on the premises. Here, for example, the beeper was monitored for a significant period after the arrival of the ether in Taos and before the application for a warrant to search.

Id.

⁴⁴⁶ *Id.* at 715-17.

⁴⁴⁷ *Id.* at 729.

The owner of property, of course, 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. Surely such an invasion is an "interference" with possessory rights; the right to exclude, which attached as soon as the can respondents purchased was delivered, had been infringed. That interference is also "meaningful"; the character of the property is profoundly different when infected with an electronic bug than when it is entirely germ free.

Id.

⁴⁴⁸ *Id.* at 730.

By attaching the beeper and using the container to conceal it, the Government in the most fundamental sense was asserting "dominion and control" over the property—the power to use the property for its own purposes. And

Cases like *Knotts* and *Karo* contain hopeful language regarding the REOP test and the implications of advancing technology, but they also raise troubling implications for whether police can use other types of technology in public places. For example, suppose that the government decides to set up cameras in order to monitor what happens in public places. From a law enforcement perspective, these cameras can be highly effective in helping the police catch criminals. For example, England maintains a fairly elaborate camera system that enables it to monitor what happens in public places such as subway stations. When a bomb was set off in the London Underground a few years ago,⁴⁴⁹ the police were able to identify and ultimately apprehend the perpetrators by reviewing closed-circuit television tapes from the affected place.⁴⁵⁰ Under decisions like *Knotts* and *Karo*, it would seem that the government could justifiably set up similar closed-circuit televisions in the United States, and monitor what happens in all public places all the time, or review the tapes afterward in an effort to uncover evidence of illegal conduct. Perhaps, governments could supplement these closed circuit systems with facial recognition technology so that they could better identify those who enter public places.⁴⁵¹ From a societal perspective, the question is whether society is willing to allow the government to set up such camera networks in all public places, and whether it is willing to allow the police or other governmental officials to continuously

“assert[ing] dominion and control” is a “seizure” in the most basic sense of the term.

Id.

⁴⁴⁹ See Don Van Natta, Jr. and David Johnson, *London Bombs Seen as Crude; Death Toll Rises to 49*, N.Y. TIMES, July 9, 2005, available at http://www.nytimes.com/2005/07/09/international/europe/09intel.html?_r=1&scp=1&sq=london%20subway%20bombing&st=cse.

⁴⁵⁰ See REPORT OF THE OFFICIAL ACCOUNT OF THE BOMBINGS IN LONDON ON 7TH JULY 2005, HOUSE OF COMMONS (May 11, 2006); *New July 7 Bomber Image Released*, BBC NEWS, Oct. 2, 2005, http://news.bbc.co.uk/2/hi/uk_news/4301512.stm (containing an image of one of the bombers, and a call to the public for help in identifying him).

⁴⁵¹ See Kanya A. Bennett, *Can Facial Recognition Technology Be Used to Fight the New War Against Terrorism?: Examining the Constitutionality of Facial Recognition Surveillance Systems*, 3 N.C. J.L. & TECH. 151 (2001).

monitor (or later review the tapes) in order to determine what people are doing in public places.

On the other hand, *Karo's* holding suggested that the Court attaches a higher value to expectations of privacy in the home, and therefore that the Court is more likely to be protective against police use of technology in that context. In other words, as applied to other types of technology in other contexts, *Karo* suggests that the Court might be more inclined to hold that there is a REOP, and therefore a search, when the police fly over a house and use sophisticated technology in order to peer down into a house. Of course, the difficulty with decisions like *Karo* is that they seem to apply the REOP test expansively only in relation to the home environment.

Forward-Looking Infrared Technology. Another case in which the Court has ruled on police use of sophisticated technologies was in *Kyllo v. United States*.⁴⁵² The technology used in *Kyllo* was FLIR (forward looking infrared detector), which allowed the police to determine the amount of heat emanating from a residence.⁴⁵³ Police used FLIR because they thought that *Kyllo* might be growing marijuana in the attic of his home with the aid of grow lights, and FLIR allowed police to determine whether there were excessive levels of heat coming from the roof, and thereby to establish probable cause to obtain a warrant to search *Kyllo's* home.⁴⁵⁴

Kyllo could have been decided in any number of ways. On the one hand, the Court could have relied on *Place*, the canine sniff case, to hold that the police did not violate *Kyllo's* REOP, and therefore that there was no search within the meaning of the Fourth Amendment. In other words, the Court could have noted that FLIR did not actually enter the house, but instead simply measured heat emanating from the house, and therefore the Court could have held that police use of FLIR was equivalent to a canine sniff. In addition, as the *Kyllo* Court noted, the police could have obtained information about the heat emanating from *Kyllo's* house without using any technolo-

⁴⁵² 533 U.S. 27 (2001).

⁴⁵³ *Id.* at 29-30.

⁴⁵⁴ *Id.*

gy at all.⁴⁵⁵ For example, following a snow storm or rain storm, the police could have observed the house from the street to determine whether the snow or precipitation dried more quickly from Kylo's house than from surrounding houses, and from that observation the police could have determined that a higher level of heat was emanating from Kylo's house, and could perhaps have surmised that Kylo was using grow lights to cultivate marijuana in the attic.⁴⁵⁶ As a result, the Court could have had held that it made no difference whether the police used FLIR or whether they simply waited until it rained or snowed. Either way, the police obtained the same information.

The Court chose not to invoke *Place's* analysis, instead finding a violation of Kylo's REOP, and therefore concluding that police use of the FLIR constituted a search within the meaning of the Fourth Amendment.⁴⁵⁷ In reaching that conclusion, the Court focused on the fact that the police were using FLIR to obtain information about Kylo's home, including the interior of the home,⁴⁵⁸ and the Court emphasized the sanctity of the home under the Fourth Amendment.⁴⁵⁹ While the Court recognized that the police could have maintained visual surveillance of a home,⁴⁶⁰ the Court expressed doubt about the permissibility of allowing the police to use technology to gain

⁴⁵⁵ *Id.* at 36 n.2.

⁴⁵⁶ *Id.*

⁴⁵⁷ *Id.*

⁴⁵⁸ *Id.* at 40.

⁴⁵⁹ *Id.* at 31 (“At the very core’ of the Fourth Amendment ‘stands the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion.’”).

⁴⁶⁰ *Id.* at 32.

We have since decoupled violation of a person's Fourth Amendment rights from trespassory violation of his property . . . but the lawfulness of warrantless visual surveillance of a home has still been preserved. As we observed in *California v. Ciraolo*, 476 U.S. 207, 213 (1986), “[t]he Fourth Amendment protection of the home has never been extended to require law enforcement officers to shield their eyes when passing by a home on public thoroughfares.” . . . [We] have held that visual observation is no “search” at all—perhaps in order to preserve somewhat more intact our doctrine that warrantless searches are presumptively unconstitutional.

Id.

information about what was happening inside of a house.⁴⁶¹ As a result, even though the technology used by the police in *Kyllo* was relatively crude (off-the-wall technology that allowed police to determine no more than the amount of heat emanating from the house), and provided only limited information about what was happening inside the house, the Court found a search had occurred because the technology was being used to snoop at a person's home,⁴⁶² a situation in which an individual's REOP is particularly strong.⁴⁶³ Moreover, the Court expressed concern that FLIR technology might be used to obtain "intimate details" about what was happening inside the house (e.g., the hour at which the lady of the house took her bath).⁴⁶⁴ Even the relatively limited information obtained from the FLIR consti-

⁴⁶¹ *Id.* at 33.

The present case involves officers on a public street engaged in more than naked-eye surveillance of a home. We have previously reserved judgment as to how much technological enhancement of ordinary perception from such a vantage point, if any, is too much. 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."

Id.

⁴⁶² *Id.* at 35-37.

⁴⁶³ *Id.* at 34-35.

While it may be difficult to refine *Katz* when the search of areas such as telephone booths, automobiles, or even the curtilage and uncovered portions of residences is at issue, in the case of the search of the interior of homes—the prototypical and hence most commonly litigated area of protected privacy—there is a ready criterion, with roots deep in the common law, of the minimal expectation of privacy that exists, and that is acknowledged to be reasonable. To withdraw protection of this minimum expectation would be to permit police technology to erode the privacy guaranteed by the Fourth Amendment. We think that obtaining by sense-enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical "intrusion into a constitutionally protected area," *Silverman v. United States*, 365 U.S. 505, 512 (1961), constitutes a search—at least where (as here) the technology in question is not in general public use. This assures preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted. On the basis of this criterion, the information obtained by the thermal imager in this case was the product of a search.

Id.

⁴⁶⁴ *Id.* at 38.

tuted a search within the meaning of the Fourth Amendment because the technology was focused on the home.⁴⁶⁵ *Kyllo* concluded that the minimal nature of the intrusion should not defeat *Kyllo*'s REOP since, in the home, "all details are intimate details" so that "a firm" and "bright" line must be drawn at "the entrance to the house," and a warrant is required.⁴⁶⁶

Kyllo, of course, like *Karo* and *Katz* itself, was one of the few cases where the Court applied the REOP test more expansively as applied to technology. However, some Justices were unhappy with that expansion. Justice Stevens, joined by the Chief Justice O'Connor and Justice Kennedy, dissented. He distinguished between "through-the-wall surveillance" (which he defined as "observer or listener direct access to information in a private area"), and "off-the-wall" surveillance (which he defined as "the thought processes used to draw inferences from information in the public domain").⁴⁶⁷ While Stevens viewed the Court's treating FLIR as being through-the-wall technology, he argued that the case actually involved only "off-the-wall" surveillance of the exterior of the home, and therefore he believed that police use of FLIR "did not invade any constitutionally protected interest in privacy."⁴⁶⁸ He noted that what "the infrared camera did in this case was passively measure heat emitted from the exterior surfaces of petitioner's home; all that those measurements showed were relative differences in emission levels, vaguely indicating that some areas of the roof and outside walls were warmer than others."⁴⁶⁹ As a result, he concluded that the police did not "obtain information that it could not have obtained by observation from outside the curtilage of the house."⁴⁷⁰

While Stevens recognized that the Court might have been concerned about future advances in technology, he concluded that the "countervailing privacy interest [in *Kyllo*] is at best

⁴⁶⁵ *Id.* at 37 ("In the home, our cases show, all details are intimate details, because the entire area is held safe from prying government eyes.").

⁴⁶⁶ *Id.* at 37, 40.

⁴⁶⁷ *Id.* at 41 (Stevens, J., dissenting).

⁴⁶⁸ *Id.*

⁴⁶⁹ *Id.* at 42-43.

⁴⁷⁰ *Id.* at 43.

trivial.”⁴⁷¹ He noted that “homes generally are insulated to keep heat in, rather than to prevent the detection of heat going out,” and he doubted that “society will suffer from a rule requiring the rare homeowner who both intends to engage in uncommon activities that produce extraordinary amounts of heat, and wishes to conceal that production from outsiders, to make sure that the surrounding area is well insulated.”⁴⁷² He also concluded that:

[t]he interest in concealing the heat escaping from one’s house pales in significance to “the chief evil against which the wording of the Fourth Amendment is directed,” the “physical entry of the home” and it is hard to believe that it is an interest the Framers sought to protect in our Constitution.⁴⁷³

Although *Kyllo* is one of the few United States Supreme Court decisions to construe *Katz* expansively (in addition to decisions like *Katz* itself and *Karo*), the decision contained an ominous warning regarding the advance of technology. The decision did not go so far as to hold that the police were absolutely precluded from using advancing technology to pry into people’s homes. On the contrary, the Court stated that the government was precluded from gaining information regarding the interior of the home using sense enhancing technology when “the technology in question is not in general public use.”⁴⁷⁴ This limitation might not raise particular concerns regarding the use of thermal imaging technology. Only particularly nosy neighbors might be interested in whether high levels of heat emanate from a neighbor’s home, and therefore limited numbers of people might be inclined to purchase such technology. However, neighbors might be inclined to purchase and use other technological devices (e.g., sophisticated listening devices) that would allow them to ascertain what their neighbors are saying or doing inside their homes. Moreover, such devices are

⁴⁷¹ *Id.* at 45.

⁴⁷² *Id.*

⁴⁷³ *Id.* at 46 (internal citations omitted) (quoting *United States v. U.S. Dist. Ct. for E. Dist. of Mich.*, 407 U.S. 297, 313 (1972)).

⁴⁷⁴ *Id.* at 34.

becoming increasingly cheaper and easier to obtain. The same can be said for spyware that might be used by police to track an individual's movements on the Internet from a remote location, or even to invade someone else's computer. As a result, *Kyllo* may have opened up a gaping hole in the Fourth Amendment. If an individual does not have a REOP in an activity, then there is no "search" when the police surveil it. If a REOP disappears as to technology that is in common use, then the advance of technology could eventually obliterate Fourth Amendment protections.

Of course, as technology becomes more common, and neighbors are able to pry into each other's lives, the Court might decide to construe *Katz* and *Kyllo* as providing protection against even technology that is readily available to the general public. Or, alternatively, the Court might choose not to do so. The Court might, for example, hold that an individual cannot have a reasonable expectation of privacy (vis-a-vis the police or other neighbors) regarding technology that is readily available to the public and in general use. If the Court moves in that direction, the *Katz* test will be an instrument for undermining rather than protecting Fourth Amendment rights. Of course, if technology becomes so widely available, the Court may reverse course or may choose not to adhere to the *Kyllo* dicta. In addition, Congress or state legislatures may decide to step in and provide protection against such snooping. Just as legislatures have adopted restrictions against wiretapping and against computer hacking, they could choose to regulate sophisticated listening devices (or other such invasive technology). Nevertheless, the *Kyllo* dicta is disconcerting.

Text Messaging. The final technology case deals with whether an individual has a REOP in text messages. That issue arose in *City of Ontario v. Quon*,⁴⁷⁵ the Court's most recent pronouncement on the REOP test and its application to technology. That case was complicated by the fact that the pager (on which the text messages were sent) had been issued to Quon by his employer (a public entity), as well as by the fact

⁴⁷⁵ 130 S. Ct. 2619 (2010).

that there was a governmental policy which provided that the employer could audit the text messages.⁴⁷⁶ The text messages were not stored on city-owned computers, but instead were sent through a wireless provider who stored the messages on its computer network.⁴⁷⁷ Quon's usage was investigated because he exceeded his character allotment, thereby subjecting the city to additional charges for his pager, and the city sought to determine whether the messages involved personal text messages or business text messages.⁴⁷⁸ After the city investigated Quon's account with the wireless provider, it commenced disciplinary proceedings when it found that Quon had sent a number of non-work related texts that were sexually related.⁴⁷⁹

The Court did not resolve the question of whether Quon had a REOP in text messages sent via his work pager, but simply assumed that he did.⁴⁸⁰ However, the Court was well aware of the problem of advancing technology, but it expressed great uncertainty regarding how the REOP test should be applied to technologies, and it also expressed a reluctance to develop far reaching rules governing technology.⁴⁸¹ The Court was well aware of the fact that communications technologies are changing quickly, as are societal expectations regarding behavior in regard to those technologies,⁴⁸² and the Court was wary about how societal norms would eventually evolve in relation to such technologies.⁴⁸³ Moreover, the Court acknowledged that cell "phone and text message communications" have become "so pervasive that some persons may consider them to be essential means or necessary instruments for self-expression, even self-identification. That might strengthen the case for an expectation of privacy."⁴⁸⁴ However, given that cell phones and pagers

⁴⁷⁶ *Id.* at 2625.

⁴⁷⁷ *Id.*

⁴⁷⁸ *Id.* at 2625-26.

⁴⁷⁹ *Id.* at 2626.

⁴⁸⁰ *Id.* at 2630.

⁴⁸¹ *Id.* at 2629-30.

⁴⁸² *Id.* at 2629. ("Rapid changes in the dynamics of communication and information transmission are evident not just in the technology itself but in what society accepts as proper behavior.")

⁴⁸³ *Id.* at 2630.

⁴⁸⁴ *Id.*

are now relatively cheap, the Court suggested that employer policies regarding the use of such devices might impact an employee's privacy expectations.⁴⁸⁵ As a result, the Court simply assumed that Quon had a REOP in the pager.⁴⁸⁶ Regardless, the Court concluded that he could not assume that his messages were immune from employer scrutiny, especially given that he was told that his messages were subject to audit, and that the nature of his job suggested that his actions might come under scrutiny given that he was charged with responding to SWAT team emergencies.⁴⁸⁷

CONCLUSION

In the decades leading up to the *Katz* decision, the Court struggled to deal with the implications of advancing technology using the Court's traditional definitions of the term "search" (defined to include a search of a person or of a "constitutionally protected area"). These struggles were reflected in decisions like *Olmstead*,⁴⁸⁸ *Goldman*⁴⁸⁹ and *Silverman*,⁴⁹⁰ which revealed deep divisions within the Court about how new forms of technology should be dealt with under the Fourth Amendment. In those cases, it became clear that the idea of an "intrusion into a constitutionally protected area" could not deal with some of the new devices that had been developed (e.g., the detectaphone), and some Justices were concerned about the possible development of new and even more sophisticated forms of surveillance technology.⁴⁹¹

When *Katz* was decided, it might have been regarded as a hopeful decision because it redefined the concept of a search for

⁴⁸⁵ *Id.* ("On the other hand, the ubiquity of those devices has made them generally affordable, so one could counter that employees who need cell phones or similar devices for personal matters can purchase and pay for their own. And employer policies concerning communications will of course shape the reasonable expectations of their employees, especially to the extent that such policies are clearly communicated.").

⁴⁸⁶ *Id.*

⁴⁸⁷ *Id.* at 2630-32.

⁴⁸⁸ *Olmstead v. United States*, 277 U.S. 438 (1928).

⁴⁸⁹ *Goldman v. United States*, 316 U.S. 129 (1942).

⁴⁹⁰ *Silverman v. United States*, 365 U.S. 505 (1961).

⁴⁹¹ *Id.* at 512.

Fourth Amendment purposes, and seemed to offer the Court an approach for dealing with new and more sophisticated forms of technology. In *Katz* itself, the Court used the REOP test to find a search under circumstances that would not have constituted a search under the Court's pre-*Katz* precedent. However, in the more than three decades since *Katz* was decided, the REOP test has not always lived up to these hopes. In the Court's non-technology decisions, as well as in its standing decisions, the Court has construed the REOP test rather narrowly. Indeed, in the overwhelming majority of cases where the Court has found a REOP, the Court would have found a search under its pre-*Katz* precedent. In several of the Court's standing decisions, when an individual would have standing to challenge a search under the Court's pre-*Katz* precedent, the Court refused to find a REOP and therefore denied standing.

The Court's post-*Katz* technology decisions are a bit more of a mixed bag. However, in a number of those cases, the Court has restrictively construed the REOP test. As a result, the Court has held that there is no violation of an individual (or company's) REOP when the police conduct surveillance using such devices as flashlights, electronic listening devices (except, of course, in *Katz*), plane flights (with one exception⁴⁹²) or electronic beepers.⁴⁹³ In addition, police have been allowed to combine technologies without violating a REOP. For example, they have been allowed to use both aircraft and photographic equipment together in order to spy down onto property.⁴⁹⁴

Despite the overall trend of the Court's post-*Katz* REOP decisions, there are heartening trends for privacy in some recent decisions. For example, the Court has tended to be protective of the home environment, and to be more likely to invalidate the use of sophisticated technologies to spy on individuals in their homes.⁴⁹⁵ This theme emerged in *United States v. Ka-*

⁴⁹² See *United States v. Karo*, 468 U.S. 705 (1984).

⁴⁹³ See *United States v. Knotts*, 460 U.S. 276 (1983).

⁴⁹⁴ See *Dow Chem. Co. v. United States*, 476 U.S. 227 (1986).

⁴⁹⁵ See *Kyllo v United States*, 533 U.S. 27 (2001);

At the risk of belaboring the obvious, private residences are places in which the individual normally expects privacy free of governmental intrusion not

ro,⁴⁹⁶ in which, although the Court recognized that police could use electronic beepers to track the movements of individuals on public streets,⁴⁹⁷ and the Court held that there was a violation of a REOP, and therefore a search, when the police used a beeper to obtain information about what was happening in a home (in particular, information about the whereabouts of the beeper and how long it remained in the home).⁴⁹⁸ Likewise, in *Kyllo v. United States*,⁴⁹⁹ the Court emphasized the importance attached to the home under the Fourth Amendment. Of course, the problem is that, in a modern technological society, the home is only one place where individuals may harbor expectations of privacy, and only one place where individuals will maintain information that they consider private. The Court's post-*Katz* decisions do not suggest a broad application of the REOP test to contexts outside the home (except, of course, for things like automobiles and suitcases—things that were pro-

authorized by a warrant, and that expectation is plainly one that society is prepared to recognize as justifiable. Our cases have not deviated from this basic Fourth Amendment principle. Searches and seizures inside a home without a warrant are presumptively unreasonable absent exigent circumstances.

Karo, 468 U.S. at 714-15.

⁴⁹⁶ *Karo*, 468 U.S. at 705.

⁴⁹⁷ See *Knotts*, 460 U.S. 276 (1983).

⁴⁹⁸ *Karo*, 468 U.S. at 715.

In this case, had a DEA agent thought it useful to enter the Taos residence to verify that the ether was actually in the house and had he done so surreptitiously and without a warrant, there is little doubt that he would have engaged in an unreasonable search within the meaning of the Fourth Amendment. For purposes of the Amendment, the result is the same where, without a warrant, the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house. The beeper tells the agent that a particular article is actually located at a particular time in the private residence and is in the possession of the person or persons whose residence is being watched. Even if visual surveillance has revealed that the article to which the beeper is attached has entered the house, the later monitoring not only verifies the officers' observations but also establishes that the article remains on the premises. Here, for example, the beeper was monitored for a significant period after the arrival of the ether in Taos and before the application for a warrant to search.

Id.

⁴⁹⁹ 533 U.S. 27 (2001).

tected under the Court's pre-*Katz* jurisprudence), especially against the use of techniques like canine sniffs.

So, where will the Court's REOP jurisprudence go from here? It is difficult to know. In dicta, in various decisions, the Court has suggested that it may be inclined to construe the REOP test more broadly if police or other governmental usage of technology becomes too overbearing or too intrusive on personal privacy. For example, in the *Dow Chemical* case,⁵⁰⁰ the Court suggested that it might place greater limits on police use of technology (in that case, aerial photography) if the government uses technology that would allow them to penetrate through walls and intrude upon intimate conversations.⁵⁰¹ In the *Knotts* case,⁵⁰² as well, concerns were raised about whether the police could use beepers and other devices to maintain "twenty-four hour surveillance of any citizen of this country . . . without judicial knowledge or supervision."⁵⁰³ Although the Court rejected this concern, it noted that it might respond if such conditions actually developed.⁵⁰⁴ On the other hand, in *Kyllo*, the Court suggested in dicta that an individual might not be able to establish a REOP against technology that is "in general public use."⁵⁰⁵ As technology becomes ever more readily available, and ever cheaper, this dicta becomes ever more worrisome.

⁵⁰⁰ *Dow Chem. Co. v. United States*, 476 U.S. 227 (1986).

⁵⁰¹ *Id.* at 238-39. The Court offered the example of a "unique sensory device that, for example, could penetrate the walls of buildings and record conversations in Dow's plants, offices, or laboratories, but rather a conventional, albeit precise, commercial camera commonly used in mapmaking." *Id.* at 238. It went on to state that:

By contrast, if the government had used an "electronic device to penetrate walls or windows so as to hear and record confidential discussions of chemical formulae or other trade secrets would raise very different and far more serious questions; other protections such as trade secret laws are available to protect commercial activities from private surveillance by competitors.

Id. at 239.

⁵⁰² *Knotts*, 460 U.S. 276 (1983).

⁵⁰³ *Id.* at 283.

⁵⁰⁴ *Id.* at 284 ("[I]f such dragnet type law enforcement practices as respondent envisions should eventually occur, there will be time enough then to determine whether different constitutional principles may be applicable.").

⁵⁰⁵ *Kyllo v United States*, 533 U.S. 27, 34 (2001).

The one thing that remains clear, some three decades after the *Katz* decision was rendered, is that the Court is still struggling to determine what the REOP test means, and there are continuing disputes between the Justices about how to apply the REOP test. Indeed, in the Court's recent decision in *City of Ontario v. Quon*,⁵⁰⁶ although the Court seemed to be cognizant of problems presented by advancing technology, the Court expressed uncertainty about its ability to resolve REOP questions as applied to new technologies, and therefore suggested that it was inclined to go slowly in developing new rules.⁵⁰⁷ The hopeful part of that decision was that the Court seemed to finally recognize that society is in flux due to the development of new technologies, as well as because of rapidly changing societal expectations regarding behavior in regard to those technologies.⁵⁰⁸ However, the Court was reluctant to speculate about how societal norms would eventually evolve in relation to such technologies,⁵⁰⁹ especially since some of these devices had evolved into what the Court referred to as "essential means or necessary instruments for self-expression, even self-identification."⁵¹⁰

Nevertheless, it is a bit surprising that the REOP test remains so ill-defined thirty plus years after *Katz* was decided. Is that because of flaws in the test itself? At least one commentator has suggested that the test should be abandoned in favor of a return to common law approaches to defining the term "search."⁵¹¹ In a number of post-*Katz* decisions, individual Jus-

⁵⁰⁶ 130 S. Ct. 2619 (2010).

⁵⁰⁷ *Id.* at 2629-30.

⁵⁰⁸ *Id.* at 2629 ("Rapid changes in the dynamics of communication and information transmission are evident not just in the technology itself but in what society accepts as proper behavior.").

⁵⁰⁹ *Id.* at 2630.

⁵¹⁰ *Id.*

⁵¹¹ See Timothy Casey, *Electronic Surveillance and the Right to Be Secure*, 41 U.C. DAVIS L. REV. 977 (2008).

Recent cases demonstrate that our Fourth Amendment jurisprudence is on the verge of collapse and will only survive if courts reclaim the original meaning and language of the Constitution. The next paradigm shift must include a departure from *Katz's* use of privacy language, and focus instead on the right of the People to be secure. Fundamental to the modern conception of personal

tices have argued that the REOP test needs to be redefined and recalibrated. For example, in *Smith v. Maryland*,⁵¹² a dissenting Justice Marshall argued that the Court should replace the *Katz* test with a new test that focuses “not on the risks an individual can be presumed to accept when imparting information to third parties, but on the risks he should be forced to assume in a free and open society.”⁵¹³ In that case, involving police use of a pen register to monitor and record the phone numbers that Smith had dialed, Justice Marshall argued that citizens should not be required to assume the risk that the numbers they dial will be turned over to authorities considering the “intrinsic character” of the investigative practice, the “basic values underlying the Fourth Amendment,” and the fact that such intrusions “significantly jeopardize [an individuals’] sense of security.”⁵¹⁴ Likewise, in *Florida v. Riley*,⁵¹⁵ a dissenting Justice Brennan argued that the Court should determine whether a REOP exists by asking “whether, if the particular form of surveillance practiced by the police is permitted to go unregulated by constitutional restraints, the amount of privacy and freedom remaining to citizens would be diminished to a compass inconsistent with the aims of a free and open society.”⁵¹⁶ Both of these tests suffer from all of the problems inherent in the REOP test because they use case-by-case approaches, and are vague, and therefore the meaning of the test can vary depend-

security, and indeed one of the basic precepts of the Founding Fathers, is the idea that the government does not ensure the security of the People, but rather that the government embodies the interest against which the People must be protected. Reclaiming the original language of the Constitution by substituting a right to personal security for a reasonable expectation of privacy will simultaneously dispel the false notion that the Fourth Amendment protects individual interests in opposition to collective interests, and reaffirm the idea that only by protecting individual security will we increase our collective personal and national security.

Id.

⁵¹² 442 U.S. 735 (1979).

⁵¹³ *Id.* at 750.

⁵¹⁴ *Id.* at 750-52.

⁵¹⁵ 488 U.S. 445 (1989).

⁵¹⁶ *Id.* at 456 (Brennan, J., dissenting) (citing and quoting Amsterdam, *supra* note 20, at 403).

ing on who is applying the test. However, both tests offer marginal improvements in that they set “mood points” for judicial analysis that are potentially more protective of privacy interests. Professor Anthony Amsterdam offered a similar sort of test when he argued that *Katz*'s REOP test should not ask us what we “expect” of government, but rather “what we should demand of government.”⁵¹⁷ By contrast, Professor Thomas Clancy has suggested that the Court should focus on the right to exclude the government.⁵¹⁸

Some privacy protections may come from the legislative arena in that Congress or state legislatures may pass legislation prohibiting certain types of practices or conduct, and we may be able to claim a REOP based on that legislation. For example, although it is relatively easy to wiretap a phone, we have laws making it illegal to do so. However, today, more than three decades after *Katz* was decided, it is not clear that the Court's REOP test is providing those protections, or that the test is capable of doing so.

⁵¹⁷ Amsterdam, *supra* note 20, at 384.

⁵¹⁸ Thomas Clancy, *Coping with Technological Change: Kyllo and the Proper Analytical Structure to Measure the Scope of Fourth Amendment Rights*, 72 MISS. L.J. 525 (2002).