



United States v. Jones: GPS Monitoring, Property, and Privacy

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Summary

In *United States v. Jones*, 132 S. Ct. 945 (2012), all nine Supreme Court Justices agreed that Jones was *searched* when the police attached a Global Positioning System (GPS) device to the undercarriage of his car and tracked his movements for four weeks. The Court, however, splintered on what constituted the search: the attachment of the device or the long-term monitoring. The majority held that the *attachment* of the GPS device and an attempt to obtain information was the violation; Justice Alito, concurring, argued that the *monitoring* was a violation of Jones's reasonable expectation of privacy; and Justice Sotomayor, also concurring, agreed with them both, but would provide further Fourth Amendment protections. This report will examine these three decisions in an effort to find their place in the body of existing Fourth Amendment law pertaining to privacy, property, and technology.

In *Jones*, the police attached a GPS tracking device to the bottom of Jones's car and monitored his movements for 28 days. At trial, the prosecution relied on Jones's movements to a stash house to tie him to a drug conspiracy. Jones was convicted and given a life sentence. The United States Court of Appeals for the District of Columbia Circuit reversed, holding that the evidence was unlawfully obtained under the Fourth Amendment. The Supreme Court agreed. The majority, speaking through Justice Scalia, explained that a physical intrusion into a constitutionally protected area, coupled with an attempt to obtain information, can constitute a violation of the Fourth Amendment. Although the Court's landmark decision in *Katz v. United States*, 389 U.S. 347 (1967), supposedly altered the focus of the Fourth Amendment from property to privacy, the majority argued that it left untouched traditional spheres of Fourth Amendment protection—a person and his house, papers, and effects. Because the police had invaded Jones's property—his car, which is an *effect*—that was all the Court needed to hold that a constitutional search had occurred.

The majority's test, however, provides little guidance in instances where the government need not physically install a device to conduct surveillance, for instance, by using cell phones or preinstalled GPS devices in vehicles. To understand how the Court may rule on these technologies, one must look to the two concurrences, which provide a more global interpretation of the Fourth Amendment. Justice Alito, writing for a four-member concurrence, would have applied the *Katz* privacy formulation, asserting that longer-term monitoring constitutes an invasion of privacy, whereas short-term monitoring does not. He left it to future courts to distinguish between the two. Justice Sotomayor's concurrence appears to provide the most protection, finding that both the trespass approach and the privacy-based approach should be utilized. She also questioned the rule that any information provided to a third party, which occurs in many commercial transactions like banking or computing, should lose all privacy protections.

Although all three opinions concluded that the government's action in *Jones* was a search, none expressly required that police get a warrant in future GPS tracking cases. (The government forfeited the argument.) Further, there is no clear indication of the level of suspicion—probable cause, reasonable suspicion, or something less—that is required to attach a GPS unit and monitor the target's movements. Additionally, there have been several bills filed in the 112th Congress, including Senator Patrick J. Leahy's Electronic Communications Privacy Act Amendment Act of 2011 (S. 1011) and Senator Ron Wyden's and Representative Jason Chaffetz's identical legislation, S. 1212 and H.R. 2168, the Geolocational Privacy and Surveillance Act (GPS bill), that would require a warrant based upon probable cause to access geolocation information.

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Introduction

There is little doubt that technology is fast becoming intertwined with our jobs, our social life, and even our most private interactions with each other. This phenomenon creates friction among many compelling interests. The first is a clash between two contrasting values: the desire for privacy and the longing to be connected through the newest and most advanced technology. To a certain extent, as one advances, the other must necessarily recede. Meanwhile, courts are tasked with determining the balance between government's law enforcement needs and the people's privacy. The Fourth Amendment to the U.S. Constitution provides the measuring stick to determine this balance. The amendment ensures "[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."¹ Its primary function is to prohibit government intrusion upon the privacy and property rights of the people. When new technology is involved, achieving this balance is not an easy undertaking.

United States v. Jones presented such a challenge to the Supreme Court. The question posed was whether the installation and month-long monitoring of a GPS device attached to Jones's car constituted a violation of the Fourth Amendment's prohibition against "unreasonable searches and seizures."² This usage of the Global Positioning System (GPS)³ is not unusual in criminal investigations,⁴ but up to that point longer-term monitoring had not been directly tested by the Court. Thus, many observers awaited the *Jones* ruling for its potential impact not only on government monitoring programs, but also on general Fourth Amendment cases involving prolonged government surveillance.

In prior government tracking cases,⁵ the Court applied the test from *Katz v. United States*, which addresses whether the individual had a reasonable expectation of privacy in the area to be searched.⁶ Because the police in *Jones* physically invaded his property to attach the GPS device—whereas in the previous cases they had not—the Court declined to apply *Katz*, but instead based its decision on a trespass theory.⁷ The trespass theory asks whether there was a physical intrusion onto a constitutionally protected area coupled with an attempt to obtain information.⁸ In *Jones*, there was, so the Court applied this more limited test and held that a search occurred. Though the majority bypassed the *Katz* approach, Justice Alito, concurring with Justices Breyer, Ginsburg, and Kagan, would have applied *Katz*.⁹ Long-term surveillance, Justice

¹ U.S. Const. amend. IV.

² *United States v. Jones*, 132 S. Ct. 945, 948 (2012).

³ GPS is a network of 24 government satellites that constantly send out radio signals and allow a receiver on Earth to determine its position. Aaron Renenger, *Satellite Tracking and the Right to Privacy*, 53 HASTINGS L. J. 549, 550 (2002).

⁴ John Ganz, *It's Already Public: Why Federal Officers Should Not Need Warrants to Use GPS Vehicle Tracking Devices*, 95 CRIM. L. & CRIMINOLOGY 1325, 1330 (2005).

⁵ *United States v. Knotts*, 460 U.S. 276, 278-79 (1983) (holding that use of tracking device while suspect was on public thoroughfares was not a violation of the Fourth Amendment as he had no reasonable expectation of privacy in his public movements); *United States v. Karo*, 468 U.S. 705, 718 (1984) (holding that use of tracking of device while in private home was a violation of the Fourth Amendment).

⁶ This reasonable expectation of privacy test was formulated by Justice Harlan in his *Katz* concurrence. *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

⁷ *Jones*, 132 S. Ct. at 952.

⁸ *Id.* at 951 n.5.

⁹ *Id.* at 958 (Alito, J., concurring).

Alito wrote, violated Jones's reasonable expectation of privacy under *Katz*. Justice Sotomayor agreed with both the majority and Alito's concurrence, but called for additional protection by questioning the viability of the third-party doctrine, which holds that any information voluntarily given to a third party loses all privacy protections.¹⁰

This report will analyze all three opinions in an attempt to determine how *Jones* might affect future use of GPS tracking and other government surveillance techniques. First, it will briefly recount the facts that led to Jones's prosecution, his appeal, and the Supreme Court's review. Next, it will analyze the majority's property-based test, evaluating it against similar Fourth Amendment case law. Additionally, this section will raise issues concerning the possible impact of this approach on similar search and seizure cases. Next, the report will examine both Justice Alito's and Justice Sotomayor's concurrences and their potential impact on cases involving technology. Because the Court did not express whether a warrant is required, the report will posit several theories on how this issue may be resolved in the future.

United States v. Jones: A Property-Based Approach to the Fourth Amendment

In 2004, a Joint Task Force of the FBI and the District of Columbia Metropolitan Police Department suspected Antoine Jones was part of a drug distribution ring.¹¹ Based on information obtained from wiretaps, a pen register,¹² and video surveillance, the task force obtained a warrant to monitor Jones's Jeep with a GPS tracking device. According to the terms of the warrant, the officers had 10 days to install it and were required to do it in the District of Columbia. The officers installed the device on the 11th day in Maryland while the Jeep was parked in a public parking lot.¹³ For the next four weeks the device tracked Jones's every movement, creating 2,000 pages of monitoring data.¹⁴ During this time, the device tracked Jones's movements to and from a known stash house.

Jones was indicted for conspiracy to distribute and possession with intent to distribute cocaine. At trial, the prosecution relied heavily on Jones's movements derived from the GPS to connect him with a larger drug ring.¹⁵ He moved to dismiss this information as a warrantless search under the Fourth Amendment. The United States District Court for the District of Columbia excluded the data derived when his car was parked in his garage but allowed into evidence all of his public movements.¹⁶ Jones was ultimately convicted and sentenced to life imprisonment.¹⁷ The United States Court of Appeals for the District of Columbia Circuit reversed, holding that the GPS data were derived in violation of Jones's reasonable expectation of privacy under the Fourth

¹⁰ *Id.* at 957 (Sotomayor, J., concurring).

¹¹ *Id.* at 948.

¹² A pen register is a device that determines the outgoing telephone numbers dialed from a telephone. 18 U.S.C. § 3127(3).

¹³ Since the device was attached one day late and in the wrong jurisdiction, the installation was considered warrantless.

¹⁴ *Id.*

¹⁵ *Id.* at 948-49.

¹⁶ *United States v. Jones*, 451 F. Supp. 2d 71, 88 (D. D.C. 2006).

¹⁷ *Jones*, 132 S. Ct. at 949.

Amendment.¹⁸ The Supreme Court then granted a writ of certiorari, agreeing to review Jones’s case.

Most observers assumed the Supreme Court would, like the D.C. Circuit Court of Appeals, apply the reasonable expectation of privacy test developed in *Katz v. United States* to determine if the tracking was a Fourth Amendment search. Under the *Katz* test, a search in the constitutional sense has occurred if the individual had an actual expectation of privacy in the area to be searched that society would deem reasonable.¹⁹ Since 1967, when *Katz* was handed down, the Court had developed a body of case law applying this privacy-based formulation of the Fourth Amendment.²⁰

The *Jones* majority, led by Justice Scalia, took a different route.²¹ It held that the *attachment* of the GPS device, coupled with its use to monitor Jones’s movements, was a constitutional search.²² The Fourth Amendment ensures 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.”²³ Because Jones’s vehicle is an *effect*—listed in the text of the Fourth Amendment—the police’s physical intrusion by attaching the GPS for tracking purposes constituted a *search*.²⁴ This theory hinges on common law trespass as it was known in 1791 (when the Fourth Amendment was adopted). It does not rely on *Katz*, nor any subjective conception of privacy. The majority contended that Jones’s rights should not strictly depend on whether his reasonably expected zone of privacy was pierced.²⁵ Rather, the majority asserted, property rights also define an individual’s right to be free from government intrusion.

Justice Alito, in concurrence, contended that the majority’s reliance on “18th-century tort law” which “might have provided grounds in 1791 for a suit based on trespass to chattels,” “strains the language of the Fourth Amendment; it has little if any support in current Fourth Amendment case law; and it is highly artificial.”²⁶ Justice Alito would have instead applied the *Katz* formulation.²⁷

¹⁸ *United States v. Maynard*, 615 F.3d 544, 555 (D.C. Cir. 2010). Because Jones’s case was consolidated with other codefendants on appeal, it was entitled *United States v. Maynard* before the D.C. Circuit Court of Appeals. It was subsequently changed back to *United States v. Jones* when reviewed by the Supreme Court.

¹⁹ *Katz v. United States*, 389 U.S. 347, 361 (1967) (Harlan, J., concurring).

²⁰ See *Kyllo v. United States*, 533 U.S. 27, 32 (2001) (“In assessing when a search is not a search, we have applied somewhat in reverse the principle first enunciated in *Katz v. United States*, 389 U.S. 347, 19 L. Ed. 2d 576, 88 S. Ct. 507 (1967)); *California v. Ciraolo*, 476 U.S. 207, 215 (1986) (“The touchstone of Fourth Amendment analysis is whether a person has a ‘constitutionally protected reasonable expectation of privacy.’ *Katz v. United States*, 389 U.S. 347, 360 (1967) (Harlan, J., concurring).”).

²¹ The majority consisted of Chief Justice Roberts, and Justices Thomas, Kennedy, and Sotomayor. In addition to joining the majority opinion, Justice Sotomayor also wrote a concurring opinion explored below.

²² *Jones*, 132 S. Ct. at 949.

²³ U.S. CONST. amend IV.

²⁴ *Jones*, 132 S. Ct. at 949.

²⁵ *Id.* at 950.

The Government contends that the Harlan standard shows that no search occurred here, since Jones had no “reasonable expectation of privacy” in the area of the Jeep accessed by Government agents (its underbody) and in the locations of the Jeep on the public roads, which were visible to all. But we need not address the Government’s contentions, because Jones’s Fourth Amendment rights do not rise or fall with the *Katz* formulation. At bottom, we must “assur[e] preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted.”

Id.

²⁶ *Id.* at 958 (Alito, J., concurring).

This criticism prompts two central questions: (1) Does the majority's property-based approach enjoy textual, historical, or jurisprudential support?; and (2) What effect will this approach have on other areas of government investigations?

The seeds for the property-based approach were planted in England in *Entick v. Carrington*, a case considered by many as an ancestor of the Fourth Amendment.²⁸ There, the English court forbade government agents from searching through Entick's home, looking for papers intended to prove his seditious writing. The agents had a general warrant to search the home, but the warrant lacked a specific description of the area to be searched and the items to be seized. Lord Camden declared that no government agent nor any other person may enter the property of another without permission, even if no harm is done.²⁹ This theory carried over to the colonies and prompted the framers to include a prohibition against unreasonable searches and seizures when drafting the Bill of Rights.³⁰ Under this common law trespass approach, the key inquiry is not necessarily the content of the information obtained by the police, but rather their method of retrieving it. The *Jones* Court had no doubts that the attachment of the GPS device (which required a trespass of Jones's car) would have been a search when the Fourth Amendment was adopted—when *Entick* was fresh in the framers' minds.³¹

Although property certainly controlled Fourth Amendment thinking during the infancy of the Fourth Amendment, its control waned in later years. *Olmstead v. United States* provides an example. There, federal agents installed several wiretaps on the telephone wires coming from Olmstead's house.³² In upholding this electronic eavesdropping, the Court ruled that the Fourth Amendment applied only when there was an official search or seizure of a person, his tangible papers and effects, and an "actual physical invasion" of the individual's home.³³ Because the installation of the wiretap did not require the agents to trespass onto Olmstead's property, the Court held that it was not a search or seizure under the Fourth Amendment.³⁴

Forty years later, the Court began its shift away from this property-centric approach. In *Warden v. Hayden*, the Court noted the property-based approach had been discredited over the years, and that privacy should be the focus of the inquiry under the Fourth Amendment.³⁵ Subsequently, the Court decided *Katz v. United States*, where it held an electronic surveillance of Katz's conversations while he was in a public telephone booth was impermissible, despite the fact that no property rights were involved.³⁶ The "Fourth Amendment protects people, not places," the

(...continued)

²⁷ *Id.*

²⁸ *Entick v. Carrington*, 95 Eng. Rep. 807 (C.P. 1765); see Ricardo J. Bascaus, *Property and Probable Cause: The Fourth Amendment's Principled Protection of Privacy*, 60 RUTGERS L. REV. 575, 581-82 (2008).

²⁹ *Entick v. Carrington*, 95 Eng. Rep. 807 (C.P. 1765).

³⁰ See Amil Akir, *Fourth Amendment First Principles*, 107 HARV. L. REV. 757, 767 (1994).

³¹ *Jones*, 132 S. Ct. at 950.

³² *Olmstead v. United States*, 277 U.S. 438, 456-57 (1928).

³³ *Id.* at 466.

³⁴ *Id.*

³⁵ *Warden, Maryland Penitentiary v. Hayden*, 387 U.S. 294, 304 (1967) ("We have recognized that the principal object of the Fourth Amendment is the protection of privacy rather than property, and have increasingly discarded fictional and procedural barriers rested on property concepts.").

³⁶ *Katz v. United States*, 389 U.S. 347, 359 (1967).

Court declared, and any search that invaded a person's "reasonable expectation of privacy" should be considered a search in the constitutional sense.³⁷

This seemingly conflicting line of cases left many wondering whether property and privacy could coexist under the Fourth Amendment. The Court attempted to reconcile these two lines in *Soldal v. County of Cook*.³⁸ There, while under the supervision of local police, a landlord had his tenant's trailer home towed from the rented lot.³⁹ The tenant sued the police under Section 1983, a civil rights statute, for a violation of his Fourth Amendment right to be free from unreasonable seizure. The Seventh Circuit Court of Appeals denied the tenant's claim, holding that any Fourth Amendment violation must be supported by some invasion of privacy.⁴⁰ The police did not invade the tenant's privacy, but only his possessory interest in the property, enough for the court to hold the Fourth Amendment inapplicable. Instead, the panel noted that the due process clause was the proper avenue of relief for a "pure deprivation of property."⁴¹

The Supreme Court disagreed, ruling that the police action was a seizure notwithstanding the lack of a privacy interest at stake.⁴² The Court took pains to note that privacy-based cases like *Katz* and *Warden* had not "snuffed out the previously recognized protection for property under the Fourth Amendment," but instead had "demonstrated that property is not the sole measure of Fourth Amendment violations."⁴³ The Court noted that the amendment does not protect possessory interests in all kinds of property, such as an open field not closely connected with a person's home, but certainly covers things specifically listed in the constitutional text—persons, houses, papers, and effects.⁴⁴

This idea that the Fourth Amendment protects both privacy and property independently is infused throughout the majority opinion in *Jones*. As Justice Scalia noted, *Katz* did not *supplant* the common law trespass approach, but merely *supplemented* it.⁴⁵ But is a simple trespass alone enough to constitute a violation? The Court answered no: in addition to the physical intrusion, there must be "an attempt to find something or to obtain information."⁴⁶ Also, not every police trespass will be a constitutional search. The government must intrude upon an area enumerated in the text of the amendment (person, houses, papers, and effects).⁴⁷ This leaves several questions. If a car is an effect, what other personal property may be covered under this approach? Will computer data constitute an *effect*? Will an e-mail constitute an electronic *paper*? If a police

³⁷ *Id.* at 351, 360 (Harlan, J., concurring).

³⁸ *Soldal v. County of Cook*, 506 U.S. 56 (1992).

³⁹ *Id.* at 58.

⁴⁰ *Soldal v. County of Cook*, 942 F.2d 1073, 1078 (7th Cir. 1991).

⁴¹ *Id.*

⁴² *Soldal*, 506 U.S. at 65.

⁴³ *Id.* at 64.

⁴⁴ *Id.* at 64 n.7.

⁴⁵ *Jones*, 132 S. Ct. at 950-951.

⁴⁶ *Id.* at 951 n.5. It is not clear from the majority opinion whether a mere attempt to obtain information is enough, or if the attempt must be successful. In one phrasing the Court requires "installation of a GPS device on a target's vehicle, and its use of that device....," *Id.* at 949 (emphasis added), and in another it requires a trespass plus "an attempt to find or to obtain information." *Id.* at 951 n.5 (emphasis added). A reasonable interpretation is that an attempt is enough: if the police were to come into a person's home looking for evidence, but found nothing, this would probably qualify under the majority's approach.

⁴⁷ *Id.* at 953 n.8.

officer walks onto one's porch, is that an invasion of his *house*? There are no easy answers to these questions.

Additionally, because the Court focused on the attachment of the device and the property interests involved, there remain questions of whether prolonged tracking with a device is permissible under the Fourth Amendment if there is no trespass. As the majority noted, “[s]ituations involving merely transmission of electronic signals without trespass would *remain* subject to *Katz* analysis.”⁴⁸ Justice Alito’s and Sotomayor’s concurrences in *Jones* may be scrutinized for how the Court might handle these scenarios under *Katz*.⁴⁹

The Implications of *Jones* and Technology

As more cell phones and cars are outfitted with GPS tracking technologies, police need not physically attach a device to track its movements. Because the *Jones* majority opinion is based on a *physical* trespass into a constitutionally protected area, it seemingly will not apply where GPS is preinstalled. Justices Alito, and his four-Justice concurrence, and Sotomayor, concurring separately, provide insight into how a future court may apply the Fourth Amendment to evolving technologies.⁵⁰ These opinions rely, to a certain extent, on the mosaic theory first discussed in the D.C. Circuit opinion, which says that tracking a person’s public movements over a long duration is constitutionally unacceptable even if tracking each of the movements individually may be permitted. Whether this approach will garner a majority on the Court is unclear. However, at a minimum, these concurrences have engendered discussion in the lower courts, with several courts citing the mosaic theory as a viable alternative.⁵¹

The question then becomes how much weight should the Alito and Sotomayor concurring opinions be accorded?⁵² There is no *one* rule to answer this question.⁵³ Generally, there are two types of concurrences in Supreme Court opinions. The first is the true concurrence, in which the Justice concurs in the judgment, but disagrees with the reasoning.⁵⁴ Justice Alito’s opinion exemplifies that type of concurrence; he agreed that the surveillance constituted a Fourth

⁴⁸ *Id.* at 953.

⁴⁹ The importance of these concurrences was noted by an FBI attorney: “[E]ven though its not technically holding, we have to anticipate how it’s going to go down the road.” Julia Angwin, *FBI Turns Off Thousands of GPS Devices After Supreme Court Ruling* (Feb. 25, 2012, 3:36 PM), <http://blogs.wsj.com/digits/2012/02/25/fbi-turns-off-thousands-of-gps-devices-after-supreme-court>.

⁵⁰ *Jones*, 132 S. Ct. at 854 (Sotomayor, J., concurring); 132 S. Ct. at 957 (Alito, J., concurring).

⁵¹ *United States v. Hanna*, No. 11-20678-CR, 2012 WL 279435, at *3 (S.D. Fla. Jan. 3, 2012) (analyzing the issue of Fourth Amendment standing under both the trespass theory and *Katz*’s privacy test); *United States v. Bradshaw*, No. 1:11-CR-257, 2012 WL 774964 (N.D. Ohio Mar. 8, 2012) (noting that the *Jones* majority did not adopt the mosaic theory); *State v. Zahn*, No. 25584, 2012 WL 862707 (S.D. Mar. 14, 2012) (holding that both the trespass approach and the mosaic theory can apply to GPS tracking).

⁵² This dialogue between concurring justices and those they are trying to persuade lies at the heart of the common law system—a case-by-case discussion between judges, lawyers, and the public about the progression of the law. RICHARD A. POSNER, *THE FEDERAL COURTS: CRISIS AND REFORM* 236 (1985).

⁵³ Igor Kirman, *Standing Apart to Be a Part: The Precedential Value of Supreme Court Concurring Opinions*, 95 COLUM. L. REV. 2083, 2096-2101 (1995) (explaining that some courts will presume precedential value in a concurring opinion while others will presume no precedential value).

⁵⁴ Lewis A. Kornhauser & Lawrence G. Sager, *The One and the Many: Adjudication in Collegial Courts*, 81 CAL. L. REV. 1 (1993).

Amendment search, but would have decided the case under the traditional reasonable expectation of privacy test instead of the trespass test. The second category is the simple concurrence, where the Justice agrees with the judgment and the reasoning of the majority,⁵⁵ but also poses possible new theories that may not be directly relevant to that particular case, but can be used later to move the law in a particular direction.⁵⁶ Justice Sotomayor's opinion seems to fit this latter category. Although these two concurrences chart somewhat different courses in their strategy and reasoning, when combined they appear to command five votes on the Court—a potential majority.⁵⁷

Justice Alito's Concurrence: A *Katz*-Based Approach

Justice Alito spends most of his concurrence attempting to counter the majority's common law trespass theory.⁵⁸ He argued that Scalia's reversion to the law as it stood in 1791 was unwise, and a return to the much-criticized property approach.⁵⁹ The focus of this report, however, is Justice Alito's discussion of long-term GPS tracking under *Katz*'s reasonable expectation of privacy test.

Before coming up on appeal, the D.C. Circuit below examined whether Jones's whereabouts over the month-long period of tracking were *exposed* to the public.⁶⁰ A person's movements are not *actually* exposed, the court answered, because the likelihood that anyone could actually follow someone for a month is highly improbable.⁶¹ Further, the movements are not *constructively* exposed because in many instances the whole is greater than the sum of the parts.⁶² This last proposition is premised on the mosaic theory. The mosaic theory supposes that tracking the whole of one's movements over an extended period of time reveals significantly more about that person than each individual trip does in isolation.⁶³ For instance, police cannot infer much about a person from *one* trip to the liquor store. However, a *daily* trip to the same liquor store would provide greater insight into the person's habits. The government has employed this theory in the national security context for protecting intelligence sources and methods of obtaining information.⁶⁴ The thrust of the argument is that unless a person has a broad view of the situation in question, he will not understand the importance of a single piece of evidence.⁶⁵ Thus, with GPS tracking, following someone for one trip may not say much about a person, but following his every movement for an extended period presumably reveals considerably more.

⁵⁵ Kirman, *supra* note 53, 2119.

⁵⁶ Scott C. Idleman, *A Prudential Theory of Judicial Candor*, 73 TEX. L. REV. 1307, 1371 (1995).

⁵⁷ Mark Tushnet, *Themes in Warren Court Biographies*, 70 N.Y.U. L. REV. 748, 763 (1995).

⁵⁸ *Jones*, 132 S. Ct. at 957 (Alito, J., concurring) Justice Alito contended that the Court melded the two distinct acts of *search* and *seizure* into one to develop its holding; that this approach is merely a return to the much-criticized *Olmstead*, when property controlled; that there are no 18th century analogs to GPS; and that the attachment would not suffice even under common tort law. *Id.*

⁵⁹ *Jones*, 132 S. Ct. at 958-59 (Alito, J., concurring).

⁶⁰ *United States v. Maynard*, 615 F.3d 544, 558 (D.C. Cir. 2010).

⁶¹ *Id.* at 558.

⁶² *Id.*

⁶³ *Id.* at 561-62.

⁶⁴ *Cent. Int. Agency v. Sims*, 471 U.S. 159, 178 (1985).

⁶⁵ *Id.* at 178.

United States v. Knotts created an obstacle to the panel’s adoption of the mosaic theory.⁶⁶ In *Knotts*, the Supreme Court held that a person has no reasonable expectation of privacy in his movements on public streets.⁶⁷ The Court, however, did not foreclose the argument that, even if traveling on public roadways, pervasive or intrusive police activity may violate the Fourth Amendment.⁶⁸ The Court suggested it would revisit the issue if police were to use “dragnet-type law enforcement practices.”⁶⁹ Although the purport of this phrase is somewhat obscure, the D.C. Circuit understood it to mean that 24-hour surveillance of a single individual was sufficient for it to apply.⁷⁰ As such, the panel ruled that the previous tracking cases were not controlling, allowing it to apply the mosaic theory.⁷¹ Based on this application, the court granted Jones’s motion to dismiss all location evidence obtained from the GPS device.

As noted earlier, Justice Scalia and the majority did not apply the mosaic theory. Instead they grounded their decision in a common law trespass theory.⁷² Justice Alito, on the other hand, wanted to confront directly this question of how technology affected a society’s expectations of privacy. He first posited that the ubiquity of cell phones, video monitoring, and other technologies in modern life shapes the average person’s expectation of privacy—presumably reducing that expectation.⁷³ Based on his understanding of *Katz*, Alito would have asked whether the use of GPS tracking involved an intrusion a reasonable person would not have expected. Under his approach, “relatively short-term monitoring of a person’s movements on public streets accords with expectations of privacy that our society has recognized as reasonable.”⁷⁴ However, the use of “longer term” GPS monitoring will in most instances violate the Fourth Amendment.⁷⁵ Justice Alito declined to create a rule for determining at what point police tracking crosses this constitutional line. He concluded that four weeks of tracking was a search.⁷⁶

Because of the limited nature of Justice Alito’s discussion, it is difficult to discern precisely which theory he employed. It is arguable that he and the three other Justices implicitly support the mosaic theory. To say that short-term monitoring is permissible, but longer-term monitoring is not, indicates there is something about the aggregation of a person’s movements that prompted these Justices to deem it a Fourth Amendment search.⁷⁷ It could also be argued that Justice Alito’s

⁶⁶ *United States v. Knotts*, 460 U.S. 276, 281 (1983).

⁶⁷ *Knotts*, 460 U.S. at 281.

⁶⁸ *Id.* at 283.

⁶⁹ *Id.* This phrase was dicta, meaning it was not essential to the case; thus it is persuasive, but not binding on lower courts.

⁷⁰ *Maynard*, 615 F.3d at 556.

⁷¹ *Id.* at 558.

⁷² *Jones*, 132 S. Ct. at 951. The Court did not repudiate the mosaic theory, but instead did not reach the question of whether this privacy-based theory would apply; the property-based approach was sufficient to resolve the case.

⁷³ *Id.* at 958 (Alito, J., concurring). Query whether the reasonable expectation of privacy test is designed to test what privacy the average person would expect. See Orin Kerr, *The Fourth Amendment and New Technologies*, 102 MICH. L. REV. 801, 838 (2004) (“A ‘reasonable expectation of privacy’ has not been equated with the expectation of privacy of a reasonable person; rather, it has been used as a term of art based heavily on property law principles.”).

⁷⁴ *Jones*, 132 S. Ct. at 964 (Alito, J., concurring).

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ The mosaic theory need not be cabined to only the GPS tracking scenario. It could apply in other contexts such as smart electric meters, Internet searches, or any other activity in which surveillance of activity over a long period of time can be aggregated to produce an in-depth look into the subject’s daily activities, belief systems, etc. CRS Report R42338, *Smart Meter Data: Privacy and Cybersecurity*, by Brandon J. Murrill, Edward C. Liu, and Richard M. (continued...)

concurrency did not accept the mosaic theory, but instead applied the probabilistic model of Fourth Amendment theory.⁷⁸ This theory supposes that when government conducts an investigation in a way that would surprise an individual, or “interferes with customs and social expectations,” it violates a reasonable expectation of privacy.⁷⁹ Justice Alito categorizes the *Katz* test as looking at the “privacy expectations of the hypothetical reasonable person”—a hypothetical person who has “a well-developed and stable set of privacy expectations.”⁸⁰ Justice Alito notes that in precomputer days, the police had the time and resources to track only persons of exceptional interest to the police. He seems to accord much importance in the belief that the hypothetical reasonable person would be surprised to learn that the police would be tracking their every movement for a month-long period—an act beyond society’s expectations.

Justice Sotomayor’s Concurrence: The Broadest Reading of the Fourth Amendment

As far as Fourth Amendment rights are concerned, Justice Sotomayor provided the broadest interpretation in *Jones* by joining the majority’s trespass approach, openly supporting Justice Alito’s privacy-based approach,⁸¹ and putting into question the continuing viability of the third-party doctrine—a theory many believe creates the largest gap in privacy protection, especially in the realm of technology.

Whereas it is unclear whether Justices Alito, Breyer, Kagan, and Ginsburg support the mosaic theory, Justice Sotomayor maintained that this theory should directly guide the Court’s determination of a person’s privacy expectations in their public movements.⁸² She noted that “GPS monitoring generates a precise, comprehensive record of a person’s public movements that reflects a wealth of detail about her familial, political, professional, religious, and sexual associations.”⁸³ As part and parcel of the mosaic theory, she contended that an individual’s awareness that the government may be constantly watching can chill one’s freedom of speech and association under the First Amendment.⁸⁴ Although the police might obtain the same evidence through traditional surveillance, there is something about the technology that troubled Justice Sotomayor. She seemed concerned that there will no longer be a logistical barrier between the government and the people. Police now have access to a cheap technology that can produce a significant amount of data. The Court must consider this a search—presumably requiring a warrant—to provide adequate oversight over the executive branch.⁸⁵ This idea seems to coincide with Justice Jackson’s well-worn saying that courts prefer that searches be overseen by a “neutral

(...continued)

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⁷⁸ Orin Kerr, *What’s the Status of the Mosaic Theory After Jones?*, THE VOLOKH CONSPIRACY (Jan. 23, 2012, 1:59 PM), <http://volokh.com/2012/01/23/whats-the-status-of-the-mosaic-theory-after-jones/>.

⁷⁹ Orin S. Kerr, *Four Models of Fourth Amendment Protection*, 60 STAN. L. REV. 503, 509 (2007).

⁸⁰ *Jones*, 132 S. Ct. at 962 (Alito, J., concurring).

⁸¹ Although she could not join his opinion, Justice Sotomayor clearly supported Justice Alito’s reasoning. *Jones*, 132 S. Ct. at 956 (Sotomayor, J., concurring) (“As Justice Alito incisively observes”; “I agree with Justice Alito....”).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

and detached magistrate instead of being judged by the officer engaged in the often competitive enterprise of ferreting out crime.”⁸⁶

Additionally, Justice Sotomayor called for a reexamination of the third-party doctrine. This doctrine supposes that any information a person voluntarily conveys to a third party is no longer entitled to Fourth Amendment protection, as the person cannot have a reasonable expectation that the third party will guard the privacy in that information.⁸⁷ This rule has been used to justify access to bank records,⁸⁸ the telephone numbers a person dials,⁸⁹ electric billing records,⁹⁰ and cell phone billing records.⁹¹ Some argue that when individuals give documents to a third party, usually in a commercial transaction, they consent to the release of such information to the government,⁹² or at a minimum assume the risk that the person trusted with the information would hand it over.⁹³ Justice Sotomayor suggests that perhaps this theory should not be permitted to reach its logical extent in the digital age, in which people convey a wealth of personal information to third parties.⁹⁴ She contends that the Fourth Amendment rules should not require a person to keep secret any information the person does not want the government to obtain. In the end, she leaves it to another day to reevaluate the third-party doctrine in an age where most private information is handed over in the course of commercial transactions. In the meantime, Justice Sotomayor believed the physical intrusion theory was enough to resolve the case.⁹⁵

Warrant Requirement after *Jones*

All nine Justices agreed that tracking a person for four months is a constitutional search. Where there is little agreement among Court observers, though, is what level of suspicion is required to conduct GPS monitoring or whether a warrant is required.⁹⁶ Because the government failed to argue that a warrant was not required or that something less than probable cause would be enough to conduct this surveillance, the Court considered the arguments forfeited.⁹⁷ Thus, to determine if

⁸⁶ *Johnson v. United States*, 333 U.S. 10, 14 (1948).

⁸⁷ *United States v. Miller*, 425 U.S. 435, 443 (1976). “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 the third party will not be betrayed.”

Id.

⁸⁸ *Miller*, 425 U.S. at 435.

⁸⁹ *Smith v. Maryland*, 442 U.S. 735 (1979).

⁹⁰ *United States v. McIntyre*, 646 F.3d 1107 (8th Cir. 2011).

⁹¹ *United States v. Hynson*, No. 05-576, 2007 WL 2692327, at *6 (E.D. Pa. Sept. 11, 2007).

⁹² See Orin S. Kerr, *The Case for a Third-Party Doctrine*, 107 MICH. L. REV. 561, 565 (2009).

⁹³ *Smith*, 442 U.S. at 744 (“Because the depositor [in *Miller*] ‘assumed the risk’ of disclosure, the Court held that it would be unreasonable for him to expect his financial records to remain private.”).

⁹⁴ *Jones*, 132 S. Ct. at 957 (Sotomayor, J., concurring).

⁹⁵ *Id.*

⁹⁶ See Peter Swire, *A Reasonableness Approach to Searches After the Jones GPS Tracking Case*, 64 STAN. L. REV. ONLINE 57 (2012); Daniel J. Solove, *United States v. Jones and the Future of Privacy Law: The Potential Far-Reaching Implications of the GPS Surveillance Case*, 90 CRIM. L. REPER. 632 (2012); Tom Goldstein, Why Jones is still less of a pro-privacy decision than most thought, SCOTUSblog (Jan. 30, 2012, 10:53 AM), <http://www.scotusblog.com/2012/01/why-jones-is-still-less-of-a-pro-privacy-decision-than-most-thought/>.

⁹⁷ *Jones*, 132 S. Ct. at 954.

a warrant or something less will be required in future cases, general Fourth Amendment principles must suffice until the courts provide further guidance.

The “ultimate touchstone” of the Fourth Amendment is reasonableness, as required by the history and text of the prohibition against “unreasonable searches and seizures.”⁹⁸ That is to say, once a court determines a *search* has occurred, it must then inquire whether it was reasonable. In most instances, the Supreme Court has required the government to obtain a warrant based upon probable cause for a search to be considered reasonable.⁹⁹ A review of the cases, however, shows that this rule is not ironclad, and that the exceptions are commonplace.¹⁰⁰

Some commentators argue that the automobile exception could apply to the use of a GPS tracking device.¹⁰¹ The automobile exception—one of the warrantless search exceptions—evolved from the exigency requirement.¹⁰² It was first formulated in the 1925 case of *Carroll v. United States*, in which the Court permitted the police, who had probable cause to suspect that the defendant’s car was carrying bootlegged liquor, to conduct a warrantless vehicle search.¹⁰³ The Court noted that it was not practicable to obtain a warrant for evidence secreted on a “ship, motor boat, wagon or automobile” because the vehicle can be “quickly moved out of the locality or jurisdiction.”¹⁰⁴ In later cases, the Court developed a second rationale for the automobile exception, reasoning that drivers have a diminished expectation of privacy when in their vehicles.¹⁰⁵ This is based on the notion that cars travel on public thoroughfares where the driver and occupants are in plain view of

⁹⁸ *Brigham City v. Stuart*, 547 U.S. 398, 403 (2006); *Nat’l Treasury Employees Union v. Von Raab*, 489 U.S. 656, 665 (1989); *California v. Acevedo*, 500 U.S. 565, 581 (1991) (Scalia, J., concurring in the judgment).

⁹⁹ *Mincey v. Arizona*, 437 U.S. 385, 390 (1978) (quoting *Katz v. United States*, 389 U.S. 347, 357 (1967)).

¹⁰⁰ The Court often states that “[t]he Fourth Amendment proscribes all unreasonable searches and seizures, and it is a cardinal principle that ‘searches conducted outside the judicial process, without prior approval by judge or magistrate, are *per se* unreasonable under the Fourth Amendment—subject only to a few specifically established and well-delineated exceptions.’” *United States v. Ross*, 456 U.S. 798, 825 (1982) (quoting *Katz v. United States*, 389 U.S. 347, 357 (1967)). One scholar aptly commented on this rule:

In fact, these exceptions are neither few nor well-delineated. There are over twenty exceptions to the probable cause or the warrant requirement or both. They include searches incident to arrest (exceptions to both); automobile searches (exception to warrant requirement); border searches (both); searches near the border (warrant and sometimes both); administrative searches (probable cause exception); administrative searches of regulated businesses (warrant); stop and frisk (both); plain view, open field seizures and prison “shakedowns” (both, because they are not covered by the fourth amendment at all); exigent circumstances (warrant); search of a person in custody (both); search incident to nonarrest when there is probable cause to arrest (both); fire investigations (warrant); warrantless entry following arrest elsewhere (warrant); boat boarding for document checks (both); consent searches (both); welfare searches (both, because not a “search”); inventory searches (both); driver’s license and vehicle registration checks (both); airport searches (both); searches at courthouse doors (both); the new “school search” (both); and finally the standing doctrine which, while not strictly an exception to fourth amendment requirements, has that effect by causing the courts to ignore fourth amendment violations.

Craig M. Bradley, *Two Models of the Fourth Amendments*, 83 MICH. L. REV. 1468, 1473-74 (1985) (internal citations omitted).

¹⁰¹ Goldstein, *supra* note 96.

¹⁰² Carol A. Chase, *Privacy Takes a Back Seat: Putting the Automobile Exception Back on Track after Several Wrong Turns*, 41 B.C. L. REV. 71, 75 (1999).

¹⁰³ *Carroll v. United States*, 267 U.S. 132 (1925).

¹⁰⁴ *Id.* at 153.

¹⁰⁵ *United States v. Chadwick*, 433 U.S. 1, 12-13 (1977).

the public.¹⁰⁶ Further, cars and drivers alike are subject to extensive government regulation,¹⁰⁷ and vehicles must undergo periodic inspections.¹⁰⁸

As noted in *Carroll*, because a vehicle can be moved quickly from the jurisdiction, requiring a warrant to attach a GPS device may not be feasible.¹⁰⁹ Also, tracking someone's public movements may not be as invasive as searching through a person's belongings as is currently permitted under the traditional automobile exception.¹¹⁰ On the reverse side, police will generally know in advance when they intend to use a GPS device, thereby negating the presumed exigency that is linked with cars. A court could hold that warrants are generally required for GPS devices, unless a true exigency existed beyond that presumed in general automobile cases, for example, in a case of kidnapping or a fleeing suspect.

Additionally, some commentators believe that the general reasonableness standard may apply, vitiating a need for a warrant.¹¹¹ These theories suppose that the intrusion on the individual is minimal and the government interest significant. In line with this reasoning, one observer posited that a *Terry*-type standard would be sufficient—that is, that the police must have reasonable suspicion to conduct a search, but need neither probable cause nor a warrant.¹¹² A court would review the reasonableness after the fact, unlike warrants, where the review comes before the search.

Conclusion

Nine Justices are seemingly in agreement that, based on the facts of *Jones*, the attachment of a GPS device to the bottom of Jones's car and tracking him for a month-long period was a constitutional search. Presented with a different set of facts, the Court's unanimity may disintegrate. For instance, if the police need not attach the device, but it is preinstalled, for example, in a cell phone or a navigation system in a car, the outcome may differ. Further, even though this surveillance was considered a search, the Court gave no guidance on whether a warrant is required or what quantum of suspicion is enough to use GPS monitoring.

That said, it is within the power of Congress or state legislatures to propose their own requirements. The federal Constitution sets the minimum constitutional standard. Legislatures (state or federal) may create more protection of privacy and property. Congress has done this on several occasions, most notably in the field of communications with the wiretap statutes.¹¹³ When technology is in flux, one may argue that the institutional capabilities of a legislature may be the

¹⁰⁶ *Cardwell v. Lewis*, 417 U.S. 583, 590 (1974).

¹⁰⁷ *Cady v. Dombrowski*, 413 U.S. 433, 441 (1973) (“All States require vehicles to be registered and operators to be licensed. States and localities have enacted extensive and detailed codes regulating the condition and manner in which motor vehicles may be operated on public streets and highways.”).

¹⁰⁸ *South Dakota v. Opperman*, 428 U.S. 364, 367-8 (1976).

¹⁰⁹ See Orin Kerr, *Jones, the Automobile Exception, and the Warrant Requirement*, THE VOLOKH CONSPIRACY (Feb. 2, 2012 12:45 AM), <http://volokh.com/2012/02/02/jones-the-automobile-exception-and-the-warrant-requirement/>.

¹¹⁰ *Id.*

¹¹¹ See Swire, *supra* note 96; Goldstein, *supra* note 96.

¹¹² Swire, *supra* note 96.

¹¹³ Kerr, *supra* note 73, at 839. For an in-depth look at the statutory regulation of communication surveillance, see CRS Report R41733, *Privacy: An Overview of the Electronic Communications Privacy Act*, by Charles Doyle.

better venue to develop these rules.¹¹⁴ Justice Alito suggested this approach in his *Jones* concurrence: “In circumstances involving dramatic technological change, the best solution to privacy concerns may be legislative. A legislative body is well situated to gauge changing public attitudes, to draw detailed lines, and to balance privacy and public safety in a comprehensive way.”¹¹⁵

There has been legislative activity in recent Congresses to update privacy laws to cover new technologies such as GPS. Senator Leahy has introduced the Electronic Communications Privacy Act Amendments Act of 2011 (S. 1011), which would prohibit the government from accessing or using a device to acquire geolocation information, unless it obtains a warrant based upon probable cause or a court order under Title I or Title IV of the Foreign Intelligence Surveillance Act (FISA) of 1978.¹¹⁶ Similarly, Senator Ron Wyden and Representative Jason Chaffetz have introduced identical legislation, S. 1212 and H.R. 2168, entitled the Geolocational Privacy and Surveillance Act, or GPS bill, which would make it unlawful for law enforcement to intercept or use a person’s location unless they obtained a warrant based upon probable cause or one of the limited exceptions applied.¹¹⁷

With each advance in technology, the courts and Congress are asked to balance a host of competing interests including privacy, property, technology, and the needs of law enforcement. It will take future cases and statutes to better delineate a proper balance.

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¹¹⁴ *Id.* at 857.

The difference favors legislatures when technology is in flux because the privacy implications of particular rules can fluctuate as technology advances. To ensure that the law maintains its intended balance, it needs mechanisms that can adapt to technological change. Legislatures are up to the task; courts generally are not. Legislatures can experiment with different rules and make frequent amendments; they can place restrictions on both public and private actors; and they can even “sunset” rules so that they apply only for a particular period of time. The courts cannot. As a result, Fourth Amendment rules will tend to lack the flexibility that a regulatory response to new technologies may require.... The statutory framework that governs Internet privacy demonstrates the flexibility and creative potential of legislative approaches.

Id. at 871.

¹¹⁵ *Jones*, 132 S. Ct. at 964 (Alito, J., concurring).

¹¹⁶ S. 1011, 112th Cong., 1st Sess. (2011).

¹¹⁷ S. 1212, H.R. 2168, 112th Cong., 1st Sess. (2011).