In the

United States Court of Appeals

For the Seventh Circuit

No. 10-1473

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

v.

JUAN MANUEL CUEVAS-PEREZ,

Defendant-Appellant.

Appeal from the United States District Court for the Southern District of Illinois.

No. 09-CR-40009—G. Patrick Murphy, Judge.

ARGUED SEPTEMBER 23, 2010—DECIDED APRIL 28, 2011

Before CUDAHY, FLAUM and WOOD, Circuit Judges.

CUDAHY, *Circuit Judge*. Juan Cuevas-Perez appeals from the denial of his motion to suppress evidence, on the grounds that the warrantless use by law enforcement of a Global Positioning System ("GPS") tracking device violated his Fourth Amendment rights. Consistent with this circuit's existing precedent, we agree that the suppression motion should have been denied, and accordingly, we affirm.

I. Facts and Procedural History

The facts of this case are not in dispute. In 2008, federal Immigration and Customs Enforcement (ICE) agents, working with local Phoenix police, came to suspect Juan Cuevas-Perez of being involved in a drug distribution operation. They installed a pole camera outside Cuevas-Perez's home, and its footage revealed Cuevas-Perez manipulating the hatch and rear door panels of his Jeep Laredo SUV (Jeep). At approximately noon on February 6, 2009, Phoenix detective Matthew Shay attached a GPS tracking unit to the Jeep while it was parked in a public area. No warrant was obtained for the GPS installation. The GPS device was programmed to send Detective Shay text message updates of its location every four minutes.

Shortly after the GPS installation, Cuevas-Perez embarked on a road trip that took him through New Mexico, Texas, Oklahoma and Missouri, and ultimately into Illinois. Sometime on February 8, while Cuevas-Perez was in Missouri, Detective Shay learned that the batteries in the GPS device were running low. Not wanting to lose track of Cuevas-Perez, Detective Shay contacted regional ICE agents and advised them of the need for visual surveillance. Then Cuevas-Perez crossed the state line and entered Illinois. Accordingly, the ICE agents asked the Illinois State Police (ISP) to take up surveillance. Once they had done so, Detective Shay discontinued the use of the GPS device; it had been in use for a total of approximately 60 hours.

The ICE agents asked the ISP to find a reason to pull over the defendant's vehicle if possible. An ISP trooper

followed Cuevas-Perez for approximately 40 miles before pulling him over for remaining in the left-hand passing lane, a minor violation of Illinois traffic law. A drugdetecting dog was dispatched to the scene, and the dog indicated the possible presence of narcotics. A subsequent search of the Jeep revealed nine packages of heroin secreted in the doors and the lining of the ceiling.

The Government charged Cuevas-Perez with possession with intent to distribute heroin in violation of 21 U.S.C. § 841(a)(1). Cuevas-Perez moved to suppress the drug evidence, arguing that it had been procured in violation of the Fourth Amendment. At the suppression hearing, the judge indicated that he believed the result was controlled by this court's decision in *United States v. Garcia*, 474 F.3d 994 (7th Cir. 2007). Accordingly, the court denied the suppression motion.

Cuevas-Perez entered a conditional guilty plea, preserving his right to appeal the suppression ruling. *See* Fed. R. Crim. P. 11(a)(2). Cuevas-Perez timely appealed. He raises three questions for our review, but given our decision it is unnecessary to reproduce them here.

II. Applicable Law

The Fourth Amendment guarantees freedom from unreasonable search and seizure, U.S. CONST. amend. IV, and the Supreme Court has explained that a "search" exists for Fourth Amendment purposes where (1) a person has

¹ See 625 ILCS 5/11-701.

a subjective expectation of privacy, and (2) society is willing to recognize the expectation of privacy as objectively reasonable. *Katz v. United States*, 389 U.S. 347, 360 (1967) (Harlan, J., concurring); see also Kyllo v. United States, 533 U.S. 27, 33 (2001).

The foundational Supreme Court precedent for GPS-related cases is United States v. Knotts, 460 U.S. 276 (1983), which held that the use of a beeper device to track a drug suspect did not violate the Fourth Amendment because it did not amount to a search or seizure. The Court explained that "[a] person traveling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another." Id. at 281. In United States v. Garcia, 474 F.3d 994 (7th Cir. 2007), we considered the Fourth Amendment implications of the installation and use of a GPS device. In reliance on *Knotts*, we explained that GPS tracking is not a search. Id. at 997 ("GPS tracking is on the same side of the divide with . . . surveillance cameras and . . . satellite imaging, and if what they do is not searching in Fourth Amendment terms, neither is GPS tracking."). We noted in particular that GPS surveillance utilizes technology to substitute "for an activity, namely following a car on a public street, that is unequivocally not a search within the meaning of the [Fourth Amendment]." Id.2 At least two sister circuits have

² With respect to an argument that *Garcia* considers only the installation of a GPS device, and not the subsequent monitoring, (continued...)

reached the same conclusion. *See United States v. Marquez*, 605 F.3d 604, 609-10 (8th Cir. 2010); *United States v. Pineda-Moreno*, 591 F.3d 1212, 1217 (9th Cir. 2010).

An important apparently contrary precedent has been established in the D.C. Circuit. *United States v. Maynard*, 615 F.3d 544 (D.C. Cir. 2010). In *Maynard*, the court considered the Fourth Amendment implications of the uninterrupted use of a GPS device for a period lasting 28 days. The court held that prolonged GPS surveillance could amount to a search, because it may reveal more than just the movements of a vehicle on public roads; that is, it may reveal something approaching the totality of a person's lifestyle, affairs and possible criminal activities during a long period. *Id.* at 558-63. The

we reject this implausibly narrow interpretation. The *Garcia* court might have been more explicit about what it was and was not deciding, but several statements make it unambiguous that the court was discussing GPS tracking and not merely installation. The court stated, "[t]he only issue is whether evidence obtained as a result of a tracking device attached to his car should have been suppressed . . . " *Id.* at 995. In like vein, the court described the relevant police conduct as a substitute for "following a car on a public street." *Id.* at 997. That comparison applies to tracking, but not installation. A contrary reading would imply that the court made those statements and then affirmed Garcia's conviction without actually deciding whether tracking him violated the Fourth Amendment and without a word about why the issue was not being reached. We believe our reading is more plausible.

² (...continued)

court stated in relevant part, "unlike one's movements during a single journey, the whole of one's movements over the course of a month is not actually exposed to the public because the likelihood anyone will observe all those movements is effectively nil." *Id.* at 558 (emphasis omitted).

III. Discussion

We are called on to decide whether the factually straightforward case before us implicates the concerns articulated in *Maynard*,³ or whether it is subject to the residual principle derived from *Knotts* and *Garcia*, that GPS tracking does not constitute a search. We believe that the present case is not like *Maynard*, and accordingly, we believe that the analysis of that case does not apply here.

The aspects of the search in *Maynard* that affected the court's decision are absent here. The 28-day surveillance in *Maynard* was much lengthier than the 60-hour surveillance in the case before us. Moreover, the *Maynard* court repeatedly distinguished the surveillance at issue there from surveillance during a single journey. *See Maynard*, 615 F.3d at 558, 560, 562, 565. For instance, the

³ We emphasize that, although an abundance of caution dictates that we consider whether *Maynard* affects the present case, our discussion of *Maynard* is not meant to approve or disapprove the result the D.C. Circuit reached under the facts of that case.

court stated, "[s]urveillance that reveals only what is already exposed to the public—such as a person's movements during a single journey—is not a search." *Id.* at 565 (citing *Knotts*, 460 U.S. at 285). The case before us, so far as the record reveals, involves such a "single-trip" duration of surveillance. Unlike in *Maynard*, the surveillance here was not lengthy and did not expose, or risk exposing, the twists and turns of Cuevas-Perez's life, including possible criminal activities, for a long period. As the *Maynard* court noted, the chances that the whole of Cuevas-Perez's movements for a month would actually be observed is effectively nil—but that is not necessarily true of movements for a much shorter period.

As to the objection that the actual course of the GPS use is not known until long after the need for a warrant might arise, that may be true, but it is beside the point: the need vel non for a warrant depends on the purpose of the GPS use. And the purpose of the GPS attachment would generally be known ex ante, even though the actual facts of its use would only be known ex post. No different from any other case, the police here were obliged to decide ex ante whether their contemplated surveillance activities would require a warrant. Here, the purpose of the GPS was apparently only to record Cuevas-Perez's trip across the country from Arizona. Therefore, assuming no significant deviation from the indicated purpose, no warrant would be required even if the Maynard analysis were applied. In that regard, it may be that the present state of precedent provides only piecemeal guidance, but this is unexceptional in the case of Fourth Amend-

ment issues, and is only a reason that law enforcement may wish to obtain a warrant in close cases.

Cuevas-Perez further argues that the GPS device in his case was different and more intrusive than those addressed in prior cases. This argument is certainly worth a try, since "the Supreme Court has insisted . . . that the meaning of a Fourth Amendment search must change to keep pace with the march of science." Garcia, 474 F.3d at 997 (internal citation omitted). In particular, Cuevas-Perez points to the fact that this GPS sent (or was capable of sending) minute-by minute messages to its operator remotely, instead of needing to be physically retrieved like models at issue in earlier cases. See Pineda-Moreno, 591 F.3d at 1213; Garcia, 474 F.3d at 995. But we are not persuaded that real-time revelation of location (although additional to the information provided in Garcia) necessarily serves the impermissible ends of the extensive GPS surveillance at issue in Maynard. And looking beyond Maynard, we do not consider this particular advancement to be significant for Fourth Amendment purposes in general: real-time information is exactly the kind of information that drivers make available by traversing public roads. The historical data gathered and stored on comparatively primitive GPS devices is actually less akin to the publicly-exposed information on which the Fourth Amendment permissibility of GPS tracking is based.4

⁴ Several other courts have considered the distinction and found it to be unimportant. *See, e.g., State v. Sveum,* 769 N.W.2d 53, 63 (continued...)

The use of GPS by law enforcement is a Fourth Amendment frontier. Undoubtedly, future cases in the tradition of *Maynard* will attempt to delineate the boundaries of the permissible use of this technology—a technology surely capable of abuses fit for a dystopian novel. But the present case does not call on us to codify the limits of allowable GPS use; indeed, in our view the case before us cannot be distinguished from the quite recent decision of this court in *Garcia* in any legally meaningful way. Viewing the present case as controlled by that precedent, we AFFIRM.

(Wis. Ct. App. 2009) ("It is not rational to limit the admission of tracking information based on whether it is obtained in real time by a signal or at a later time by direct access to the device."), aff'd, 787 N.W.2d 317 (Wis. 2010), cert. denied, 131 S. Ct. 803 (2010); Foltz v. Commonwealth, 698 S.E.2d 281, 289-90 (Va. Ct. App. 2010) ("Unlike here, where the GPS system automatically tracked and recorded the movement of the van [in real time], the beeper technology discussed in Knotts required that the police follow the signal from the beeper as the container was moved. We find that this advancement in tracking technology provides an insufficient basis for distinguishing Knotts.") (internal citation omitted), reh'g en banc granted, 699 S.E.2d 522 (2010).

^{4 (...}continued)

FLAUM, Circuit Judge, concurring. I share Judge Cudahy's view that this appeal's outcome is governed by *United States v. Garcia*, 474 F.3d 994 (7th Cir. 2007), and join the opinion of the court to that extent. I write separately, however, because the opinion could be read to imply that, on different facts, we might adopt the D.C. Circuit's reasoning in *United States v. Maynard*, 615 F.3d 544 (D.C. Cir. 2010) (reversing a denial of a motion to suppress evidence where the government used GPS tracking for 28 days and announcing a "mosaic" conception of Fourth Amendment searches). The dissenting opinion of Judge Wood leaves no doubt, maintaining that *Maynard*'s time is now.

I believe that *Maynard* is wrongly decided. The opinion incorrectly concludes that *United States v. Knotts*, 460 U.S. 276 (1983) (holding that a person does not have a reasonable expectation of privacy in movements from one place to another on public thoroughfares), does not apply to GPS technology. After concluding that *Knotts* does not apply, the decision constructs a framework for analyzing GPS monitoring based on an unsound constitutional foundation.

Make no mistake, concerns over privacy in the information era may make it appropriate to reconsider the principles used for determining whether law enforcement activity constitutes a search within the Fourth Amendment's meaning. The dissenting opinion cogently makes the point. For now, however, the path for lower courts is clear: the holding of *Knotts* governs GPS monitoring. The practice of using these devices to monitor movements

on public roads falls squarely within the Court's consistent teaching that people do not have a legitimate expectation of privacy in that which they reveal to third parties or leave open to view by others. See, e.g., Florida v. Riley, 488 U.S. 445, 449-50 (1989) (plurality opinion); California v. Greenwood, 486 U.S. 35, 40-41 (1988); Dow Chem. Co. v. United States, 476 U.S. 227, 238 (1986); New York v. Class, 475 U.S. 106, 114 (1986); Smith v. Maryland, 442 U.S. 735, 743-44 (1979); Katz v. United States, 389 U.S. 347, 361 (1967) (Harlan, J., concurring) ("[O]bjects, activities, or statements that [a person] exposes to the 'plain view' of outsiders are not 'protected' because no intention to keep them to himself has been exhibited."). If the doctrine needs clarifying, tweaking, or an overhaul in light of technologies employed by law enforcement, that additional guidance should come from the Supreme Court. The matter is, as they say, above our pay grade.

I.

The Fourth Amendment to the United States Constitution provides: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause" U.S. CONST. amend. IV. With few exceptions, based on "the exigencies of the situation," a search is unreasonable—and therefore unlawful—if not authorized by a search warrant. *Mincey v. Arizona*, 437 U.S. 385, 393-94 (1978); see also United States v. Ross, 456 U.S. 798, 809 (1982) (automobile exception to the warrant requirement). And

when a search is unreasonable, the so-called exclusionary rule kicks in to vindicate the Fourth Amendment's protections by kicking out the unlawfully obtained evidence. *See Herring v. United States*, 129 S. Ct. 695, 699 (2009).

If there is no search (or seizure), however, then constitutional guarantees do not come into play. And, perhaps counterintuitively, just because law enforcement go looking for some one or some thing does not mean that they have conducted a search within the meaning of the Fourth Amendment.¹ To determine whether government activity constitutes a search, well established doc-

¹ Courts look to doctrine rather than the ordinary meaning of the term "search" to figure out if law enforcement have conducted a search. That may seem odd, but it (ultimately) makes sense. In the founding era, the word meant much the same as it means now. To search meant "[t]o look over or through for the purpose of finding something; to explore; to examine by inspection; as, to search the house for a book; to search the wood for a thief." Kyllo v. United States, 533 U.S. 27, 33 n.1 (2001) (quoting N. Webster, AN AMERICAN DICTIONARY OF THE ENGLISH LANGUAGE 66 (1828) (reprint 6th ed. 1989)). As the majority noted in Kyllo, defining search by reference to doctrine may represent an effort to preserve the presumption that law enforcement obtain a warrant prior to conducting searches. However, applying doctrine to define search has little practical effect—other than frustrating conversations with laypersons. Even if courts looked to the ordinary meaning of the word search to define it, courts would still have to figure out what circumstances demand a search warrant. The Constitution is silent on that point, so exegesis would leave dictionaries dusty and bring us right back to doctrine.

trine teaches that we ask two questions; only if the answer to both is yes has the government conducted a search. First, we ask whether an individual "by his conduct has exhibited an actual (subjective) expectation of privacy." *Smith v. Maryland*, 442 U.S. 735, 740 (1979) (quotation marks omitted). The second question, where most of the case-law action takes place, is whether the individual's expectation of privacy is "objectively reasonable"—that is, whether *society* is willing to recognize the expectation of privacy as reasonable. *Id.* The genesis of that two-part framework is the concurring opinion, authored by the second Justice John Marshall Harlan, in *Katz v. United States*, 389 U.S. 347 (1967).

In applying the *Katz* framework in the context of electronic surveillance, the Court has held that people lack a reasonable expectation of privacy in their movements over public thoroughfares from one place to another. That is the holding of *Knotts*, 460 U.S. 276; *see also United States v. Karo*, 468 U.S. 705, 707 (1984) (*Knotts* reaches information that could have been obtained through visual surveillance); *Illinois v. Andreas*, 463 U.S. 765, 774 (1983) (Brennan, J., dissenting) (reading *Knotts* more broadly for the proposition that a person has no privacy interest in the location of his automobile on public roads). Leroy Knotts was arrested for his part in a methamphetamine operation. To nab Knotts, law enforcement used a combination of visual surveillance and a beeper² to zero

² A beeper is a radio transmitter that "emits periodic signals that can be picked up by a receiver." *Knotts*, 460 U.S. at 277. (continued...)

in on a shipment of chloroform making its way from Minneapolis, Minnesota, to Knotts's cabin in Shell Lake, Wisconsin. After tracking the vehicle to the cabin, law enforcement procured a search warrant, where they found a fully operational drug lab. Knotts, 460 U.S. at 278-79. Knotts was arrested and convicted, and the Court's decision upheld the denial of his motion to suppress the evidence against him. The Court held that a "person travelling in an automobile on public thoroughfares has no reasonable expectation of privacy in his movements from one place to another." Id. at 281. In reaching its decision, the Court likened the use of a beeper to following an automobile on public streets and highways, which it presupposed did not implicate Fourth Amendment concerns. Therefore, police—who could have maintained visual contact with the shipment—were allowed to augment their faculties with technology, id. at 282, even though it is more accurate to say they substituted their faculties, for police lost visual contact during the operation, id. at 278. Yet, nothing about the effectiveness of beepers undermined their constitutionality: "[w]e have never equated police efficiency with constitutionality, and we decline to do so now." Id. at 284.

A GPS device works differently than a beeper, but nothing inheres in the technology to take it out of

² (...continued)

Police had installed a beeper in a container of chloroform before the chloroform was purchased by one of Knotts's associates.

Knotts's holding. A beeper transmits a signal that a receiver can detect. With GPS technology, the unit itself is a receiver: using a process called trilateration, the unit pieces together the geographical coordinates of its location based on its position relative to several orbiting satellites. Renée McDonald Hutchins, Tied up in Knotts? GPS Technology and the Fourth Amendment, 55 UCLA L. REV 409, 415-17 (2007) (arguing that the warrant requirement should apply to law enforcement use of GPS tracking technology). When affixed to a vehicle, the GPS unit can either record the vehicle's movements for later downloading or transmit the information at intervals. To be sure, GPS units are far more accurate than beepers. Compare Karo, 468 U.S. at 708 (explaining that the beeper in that case was accurate enough for officers to learn that cans of ether were in a commercial storage facility, but not enough to identify the locker in which the cans were stored), with Hutchins, supra, at 420 (ever improving GPS technology can be accurate to within roughly 6.5 feet). Yet, Knotts indicates that the precision of GPS technology does not render a person's expectation of privacy more reasonable: "Insofar as respondent's complaint appears to be simply that scientific devices such as the beeper enabled police to be more effective in detecting crime, it simply has no constitutional foundation." Knotts, 460 U.S. at 284.

II.

The D.C. Circuit's first ambition in *Maynard* is to conclude that *Knotts* does not govern when police engage in

GPS monitoring for a prolonged period of time. The dissent goes farther, suggesting that the intent of law enforcement at the time the "events were unfolding," post, at 46, is what matters. *Contra Karo*, 468 U.S. at 712 ("[W]e have never held that potential, as opposed to actual, invasions of privacy constitute searches for purposes of the Fourth Amendment."). To reach its conclusion that *Knotts* does not govern, the D.C. Circuit relies on dicta from *Knotts* in which the Supreme Court suggested that unspecified legal principles, different from the ones the Court had just announced, might apply to either mass surveillance or prolonged surveillance.

Specifically, the defendant in *Knotts* had argued to the Court that removing beepers from Fourth Amendment scrutiny would clear the way for "twenty-four hour surveillance of any citizen of this country....[A]ny person or residence could be monitored at any time and for any length of time." *See* Brief for Respondent at 9, *Knotts*, 460 U.S. 276 (No. 81-1802). (At the time the concern was science fiction; now it is all too possible.) The Supreme Court addressed the concern by intimating that it might reconsider its doctrine in the future. "[I]f such dragnet type law enforcement practices as respondent envisions should eventually occur, there will be time enough to determine whether different constitutional principles may be applicable." *Knotts*, 460 U.S. at 284.³

³ Before and after *Knotts*, individual justices have concluded in essence that the time has come, that the doctrine as imple-(continued...)

Precisely what the Court was reserving in *Knotts* is hardly clear. Ambiguity arises because the phrase "twentyfour surveillance" is commonly used as shorthand for around-the-clock surveillance over a prolonged time period. Yet, Knotts's concern seems to have been that any person, perhaps every person, could be monitored by the government. That concern seems better characterized as mass surveillance and the concern was acknowledged by the Court's use of the word "dragnet." Thus, it appears that the Court recognized both concerns, but whether one or both must be present to trigger the reservation in *Knotts* is not self-evident. *Compare* Maynard, 615 F.3d at 556-57 (Knotts reserved the issue of prolonged 24-hour surveillance), with Garcia, 474 F.3d at 998 (reserving the issue of mass surveillance). Likewise, the suggestion that different constitutional principles could apply is vague. It could mean that Katz may not be the right way to look at the question of electronic monitoring, or it could mean that additional limiting principles might cabin *Knotts*.

³ (...continued)

mented inadequately protects privacy in light of technological advances. *E.g.*, *Dow Chem.*, 476 U.S. at 240 (Powell, J., concurring in part and dissenting in part) (predicting that the majority's approach would "permit the gradual decay [of Fourth Amendment rights] as technology advances"); *see also Olmstead v. United States*, 277 U.S. 438, 473 (1928) (Brandeis, J., dissenting) (observing that technological innovation permits the government to learn what is "whispered in the closet" far more effectively than by means of torture).

Regardless of the precise contours of Knotts's reservation, however, I do not believe it invests lower courts with the authority to depart from the case's holding. The decision in *Knotts* cannot fairly be read to imply that a court could determine that the use of dragnet law enforcement tactics—whatever that means—amounts to a search under the Fourth Amendment. Rather, Knotts says that different "constitutional principles" could apply to the entire question of whether and when electronic monitoring constitutes a search. The case holds that a person does not have a reasonable expectation of privacy in her movements over public thoroughfares from one place to another. It is difficult to see—based on the case law we have—how aggregating a nullity over a longer time period, or for more trips, yields an expectation of privacy. Thus, I respectfully disagree with the dissent's conclusion that the case falls outside the scope of the Supreme Court's rule that only it can overrule one of its precedents. See State Oil Co. v. Khan, 522 U.S. 3, 20 (1997). The holding in *Knotts* is that a person has no expectation of privacy in movements from one place to another on public roads; by its terms, the holding is indifferent to the technology used to observe those movements.

III.

The fact that *Knotts* controls should end the inquiry. Nonetheless, it is worth noting that *Maynard's* reasoning does not fit comfortably with the Supreme Court's Fourth Amendment search cases.

Having freed itself from *Knotts*, the *Maynard* decision falls back on the more general framework announced by Justice Harlan's seminal concurrence in *Katz*: a person has a legitimate expectation of privacy, and hence the Fourth Amendment's strictures apply, when a person's subjective expectation of privacy is objectively reasonable. 389 U.S. at 361. The Maynard Court ruled that the defendant's expectation of privacy was objectively reasonable in that case because (1) his movements during the course of a month were not actually exposed to the public, as the probability that someone would observe the movements for a month was "effectively nil," Maynard, 615 F.3d at 560, and (2) the defendant's movements were not constructively exposed either because the picture that law enforcement could obtain from one-month-long surveillance revealed a whole that was greater than the sum of its parts, id. at 561-62 ("Repeated visits to a church, a gym, a bar, or a bookie tell a story not told by any single visit, as does one's not visiting any of these places over the course of a month.").

Neither of Maynard's twin bases for ruling that the defendant had an objectively reasonable expectation of privacy is doctrinally sound—or all that workable as a practical matter.

A.

To make the argument that the defendant's movements were not "actually exposed" to the public, *Maynard* starts from the premise that "[i]n considering whether something is 'exposed' to the public as that term was

used in Katz we ask not what another person can physically and may lawfully do but rather what a reasonable person expects another might actually do." 615 F.3d at 559. The probabilities premise is flawed. A person's expectations about actual likelihoods may indicate whether a person had a subjective expectation of privacy, but those expectations are not talismanic on the question of whether a person's expectation of privacy is objectively reasonable. Rakas v. Illinois, 439 U.S. 128, 143 n.12 (1978) (a "legitimate" expectation of privacy "means more than a subjective expectation of not being discovered"). Take United States v. Jacobsen, 466 U.S. 109, 122 & n.22 (1984), which held that federal agents did not conduct a search when they conducted a field test on cocaine discovered by a shipping company. There, the Court said, "The concept of an interest in privacy that society is prepared to recognize as reasonable is, by its very nature, critically different from the mere expectation, however well justified, that certain facts will not come to the attention of authorities." 466 U.S. at 122. A strictly probabilities-based test for exposure is likewise hard to square with cases like *United States v. White*, 401 U.S. 745 (1971). In White, a plurality of the Court ruled that *Katz* left undisturbed the teaching in *Hoffa v. United States* that the Fourth Amendment affords no protection to "a wrongdoer's misplaced belief that a person to whom he voluntarily confides his wrongdoing will not reveal it." White, 401 U.S. at 748-49. Yet, how many people expect that their associates are wearing wires when they come to visit? The act is, I imagine, as unexpected as it is unfriendly.

To support its conception of actual exposure, Maynard focuses on Riley, the case in which the Court held that police surveillance of a greenhouse within a home's curtilage, from an altitude of 400 feet, did not infringe on a defendant's reasonable expectation of privacy. In reaching the conclusion, both the plurality and the concurrence noted that helicopter traffic was relatively routine. See Riley, 488 U.S. at 450, 453. It overstates the case, however, to equate the Court's observations about the routineness of air travel—in the context of law enforcement activity directed toward the home—as enacting a probability-based prism for evaluating whether a person's expectation of privacy is reasonable. Nor does the case support the D.C. Circuit's apparent conclusion that the reasonableness inquiry turns on the likelihood that a "stranger" would make the observations in question. See Maynard, 615 F.3d at 560.

After all, even knowing that air travel is routine, no one actually expects that someone might hover over his house: just as proximate cause represents a policy judgment about when an outcome should be attributed to a person's actions, the reasonable-expectation-of-privacy framework from *Katz* represents a policy judgment (albeit by reference to society) about when the law will *honor* someone's prediction or hope that no one is watching. One might reasonably ask whether judges are the best actors to make that determination. *See* Akhil Reed Amar, THE BILL OF RIGHTS: CREATION AND RECONSTRUCTION 70 (1998) (observing that "[j]udges and warrants are the heavies, not the heroes, of the [Fourth Amendment] story"). Nonetheless, the Supreme Court's

case law does not indicate to me that the society will put its imprimatur on an expectation of privacy in publicly revealed information simply because the person thinks no one is watching. See also Greenwood, 486 U.S. at 39-40 ("It may well be that respondents did not expect that the contents of their garbage bags would become known to the police or other members of the public. An expectation of privacy does not give rise to Fourth Amendment protection, however, unless society is prepared to accept that expectation as objectively reasonable."); Smith, 442 U.S. at 743-44 (noting that even if the petitioner did expect that the phone company would keep his calling information private, the expectation would not be reasonable because "a person has no legitimate expectation of privacy in information he voluntarily turns over to third parties").

So, Maynard's gloss that someone's information has not been "actually" exposed unless it was reasonably likely someone would gather the information and aggregate it—which seems like another flavor of "constructive" exposure anyway, given that police actually gathered the publicly exposed information—seems untenable. Under the governing legal framework, the point is not that one expects to remain free from observation as a probabilistic matter. The point is that, having become aware of the fact that there are people in public spaces who root through garbage, as in Greenwood, or that people in aircraft might peer down from the sky, as in Riley and California v. Ciraolo, 476 U.S. 207 (1986), a person is not entitled to expect that he will remain free from observation. Indeed, cases like Riley and Green-

wood, and Oliver v. United States, 466 U.S. 170, 177-79 (1984) (no search where police trespass into open fields marked by no-trespassing signs), often prove striking for law students precisely because their intuitions tell them that a person would not expect—as a probabilistic matter—to be subjected to the search technique in question.

Like Riley, the Supreme Court's limited discussion of probabilities in Bond v. United States, 529 U.S. 334 (2000), and Kyllo v. United States, 533 U.S. 27 (2001), do not provide robust support for the D.C. Circuit's conception of the Fourth Amendment. In Bond, the Court ruled that a defendant did not expose the contents of his soft luggage to the public, despite the fact that it was vulnerable to "tactile observation" while in an overhead bin, because police manipulation of a bag was significantly more invasive than the casual contact that a traveler expects. 529 U.S. at 338-39. In Kyllo, the Court relied in part on the fact that the thermal imaging tool that law enforcement used to learn about activities within the home was not in widespread public use. 4 533 U.S. at 34 (emphasizing that the sanctity of the home made the analysis relatively easy in that case). Dicta in both cases provide arguable support for Maynard's gloss on the

⁴ That point would not help Cuevas-Perez, as GPS technology is easily obtainable and appears to be in widespread use. A simple Internet search is nothing less than revelatory. The Orion ST-811 used in this case is similar to publicly available counterparts in terms of one's ability to keep tabs on someone in close to real time, for extended periods of time.

Fourth Amendment, but the D.C. Circuit galvanizes the dicta and elevates their doctrinal role. In Riley, Bond, and Kyllo, law enforcement were subjecting individuals to an investigative technique in an area where Fourth Amendment concerns apply, or to an effect enjoying Fourth Amendment protections. That feature matters. Although it has become an old saw that the Fourth Amendment protects people, not places, the starting point in the Katz inquiry generally "requires reference to a 'place,' " Katz, 389 U.S. at 361 (Harlan, J., concurring), or to an effect, Bond, 529 U.S. at 336. See also Maryland v. Macon, 472 U.S. 463, 469 (1985) (individual had no expectation of privacy in areas of a store where the public was invited to transact business); Segura v. United States, 468 U.S. 796, 820 (1984) ("Nowhere are expectations of privacy greater than in the home."). Without a legitimate expectation of privacy, talk of probabilities and routineness never gets off the ground.⁵

⁵ Maynard does point to a handful of state statutes limiting the use of GPS devices, 615 F.3d at 564, and positive law may give rise to a legitimate expectation of privacy, e.g., Oliver, 466 U.S. at 189 (Marshall, J., dissenting). The D.C. Circuit, however, was correct to evince caution in relying on these state laws as supporting a societal understanding, both because their number is relatively small and because the case law does not indicate that such statutes will automatically lead to constitutionalized interests in privacy. See Jacobsen, 466 U.S. at 122 n.22 (quoting Rakas, 439 U.S. at 143-44 n.12); Greenwood, 486 U.S. at 55 n.4 (Brennan, J., dissenting) (suggesting that (continued...)

In addition to its legal shortcomings, the probabilistic "actual exposure" approach to Fourth Amendment searches is problematic because it is unworkable. How likely is it that a person actually would have followed Cuevas-Perez from Texas to Illinois? To determine if it was so unlikely that the Fourth Amendment applies, we presumably would draw on Knotts and figure out the likelihood that a person would be observed driving for several hours from a city like Minneapolis, Minnesota, to the more remote setting of Shell Lake, Wisconsin. Is that less likely than the odds that a person would be observed traveling from Texas to Illinois along major highways? If a court wanted to answer that fraught question, it would ask about the frequency with which people take the different routes, the populations at the endpoints in the journeys, how likely people are to peel off at particular exits, and so forth. The framework would prove impossible for law enforcement to administer ex ante. Kyllo, 533 U.S. at 38-39 (allowing warrantless thermal imaging so long as no "intimate details" were revealed would be "impractical in application" in part because police could not know in advance whether they were engaged in a search). And it is unlikely that courts would prove particularly good at the task ex post, as they would probably just rely on empirical hunches anyway. Cf. Leonard Mlodinow, THE DRUNKARD'S WALK: HOW RANDOMNESS RULES OUR LIVES 37-40 (2008) (recount-

^{(...}continued)

a statute may reinforce a right to privacy but that the statute and right are not inextricably linked).

ing, and explaining the probabilities involved in, a California Supreme Court case that "illustrat[es] the use and misuse of probability in law").

The decision in *Maynard* does not indicate how courts are to decide "actual exposure" arguments, nor does the idea have an obvious limiting principle. Indeed, *Maynard's* conception of probabilities might render unconstitutional a great deal of bread-and-butter law enforcement work. Few people would expect that they are being investigated at all, much less for prolonged periods of time, regardless of the technology at issue. Are all prolonged investigations on the constitutional chopping block unless police have probable cause and a warrant? If *Maynard* aims at preserving traditional law enforcement techniques while addressing legitimate concerns about the government's ability to use technology to peer into the lives of its citizens, its concept of actual exposure seems to miss the mark.

В.

The other basis for *Maynard*'s holding that police violated the defendant's expectation of privacy was its conclusion that the information about the defendant's movements was not "constructively" exposed to law enforcement. (Perhaps it would have made more sense to say that movements were constructively shielded from view.) The idea is that law enforcement engage in a search when their investigative activity allows them, over the long term, to learn intimate details about a person's life. The D.C. Circuit likens the notion to a "mosaic"

in which law enforcement can obtain a whole picture that is greater than the sum of its parts. *Maynard*, 615 F.3d at 562.

Constructive exposure is the second of Maynard's twin pillars, and counsel for Cuevas-Perez invoked the concern at oral argument. The response is straightforward: the fact that law enforcement are able to take information that is revealed publicly and piece together an intimate picture of someone's life does not raise constitutional concerns under current doctrine. What matters is that the information has been willingly conveyed, not that someone has aggregated it. Perhaps the starkest exemplar of that teaching comes from the Supreme Court's decision in *Greenwood*. That is the case in which the Supreme Court held that police do not effect a Fourth Amendment search when they go sifting through a person's garbage that has been left outside the curtilage of the home. Greenwood, 486 U.S. at 40-41. As Justice Brennan's dissent noted, "A single bag of trash testifies eloquently to the eating, reading, and recreational habits of the person who produced it." Id. at 50. The information in a bag of trash runs the gamut, from sexual practices to financial information to private thoughts and everything in between. Id. The same concerns are present with the pen registers in Smith. The government, with a list of phone numbers in hand, could learn much about a person's take-out ordering habits, the frequency of trips to the doctor's office, and the particulars of familial relations. Of course, nothing half so titillating was revealed by Cuevas-Perez's journey from Texas to Illinois, but even if intimate facts had been

revealed, the argument (and the D.C. Circuit's decision in *Maynard*) is difficult to reconcile with cases like *Greenwood* and *Smith*.

In fact, other than Smith, which upheld the government's warrantless use of pen registers, the D.C. Circuit cites scant Supreme Court Fourth Amendment case law in support of its constructive exposure framework. (The opinion suggests that the Court in Smith implicitly recognized the mosaic concern, Maynard, 615 F.3d at 561, but it is too implicit for me to perceive.) Instead, the D.C. Circuit relies principally on a Freedom of Information Act case, in which context the Court ruled that the contents of an FBI rap sheet were exempt from disclosure under the statute's privacy exemption. Maynard 615 F.3d at 561 (citing United States Dep't of Justice v. Reporters Comm. for Freedom of the Press, 489 U.S. 749, 764 (1989)). But the case is inapposite, for the FOIA case tells us only when something is private under a statute, not whether a person has an expectation of privacy under the United States Constitution. With respect to FOIA, the Act itself tells us whether a person has an expectation of privacy, based on whether the information may be withheld or must be released. Reporters Comm., 489 U.S. at 772 (noting that the applicability of the exemption, which allows information constituting an "unwarranted invasion of personal privacy" to be withheld, turns on the purposes of FOIA). It is not obvious why we should look to FOIA to tell us what society expects to remain private for Fourth Amendment purposes.

The *Maynard* opinion also relies on state supreme court cases which have held that GPS monitoring

violates state constitutional guarantees. 615 F.3d at 562. Here, too, reliance is misplaced. Those cases acknowledge that the Supreme Court has interpreted the protections in the U.S. Constitution more narrowly than state courts have interpreted their own constitutions. See People v. Weaver, 909 N.E.2d 1195, 1202 (N.Y. 2009); State v. Jackson, 76 P.3d 217, 222 (Wash. 2003); id. at 223-24 (finding "persuasive" the analysis in an Oregon case that squarely conflicts with Knotts's refusal to consider technological efficiency in evaluating constitutionality).

Moreover, the mosaic approach, like a probabilistic "actual exposure" approach, would prove unworkable. Law enforcement—at some point—would have to stop looking at that which is publicly exposed. But how can one discern the point before the fact? I do not see how, and *Maynard* does not suggest answers. The case's reasoning, however, suggests that the government ought to be circumspect in using confidential informants for extended periods of time, engaging in visual surveillance in the same areas in search of drug farms, or infiltrating organized crime or terrorist organizations in an effort to build a case.

Again, however, I believe that *Knotts* governs. Although it is not as obvious to me as it is to my dissenting colleague where the D.C. Circuit would draw constitutional lines around Cuevas-Perez's sixty-hour journey, *see Maynard*, 615 F.3d at 558 (suggesting that its holding would not reach government tracking of a "single journey" by a defendant), I do not find it necessary to ask the ques-

tion. Nor do I find it necessary to ask whether a reasonable suspicion standard would accommodate the competing constitutional interests at play. *Cf. Karo*, 468 U.S. at 718 n.5 (intimating that reasonable suspicion might be sufficient to allow monitoring of a beeper in the home).

IV.

New technologies and their potential to threaten privacy may indeed raise Fourth Amendment hackles. They certainly raise valid policy questions. (Think of the ability of powerful computers to amass tremendous stores of information on the public.) If we were empowered to examine the questions surrounding GPS monitoring, I would look to principles different from those relied upon in Maynard—ones that more obviously speak to the technology at issue here without suggesting the invalidity of a host of traditional, legitimate law enforcement techniques. There may be a colorable argument, for instance, that the use of GPS technology to engage in long-term tracking is analogous to general warrants that the Fourth Amendment was designed to curtail, because of the technology's potential to be used arbitrarily or because it may alter the relationship between citizen and government in a way that is inimical to democratic society. See Illinois v. Krull, 480 U.S. 340, 362 (1987) (O'Connor, J., dissenting) (Fourth Amendment was designed to curtail indiscriminate searches); Wolf v. People of the State of Colorado, 338 U.S. 25, 27 (1949) (Frankfurter, J.) ("The security of one's privacy against arbitrary intrusion by the police—which is at the core of the Fourth Amend-

ment—is basic to a free society."); Thomas Y. Davies, Recovering the Original Fourth Amendment, 98 MICH. L. REV. 547, 552, 657 (1999) (teaching that general warrants were "reviled as a source of arbitrary power" and explaining that the Founders "saw no need for a constitutional standard to regulate the warrantless officer because they did not perceive the warrantless officer as being capable of posing a significant threat to the security of person or house"); id. at 668 (at the time of the founding there was no pressing need to regulate warrantless government authority in part because the authority of officers was limited); see also United States v. White, 401 U.S. 745, 762 (1971) (Douglas, J., dissenting) ("Monitoring, if prevalent, . . . kills free discourse"). On this view, the constitutional ill of prolonged or mass use of GPS technology would not necessarily be based on the information acquired by the device but on the fact of the government's gaze.

Of course, the Supreme Court just last term reminded us that "[t]he judiciary risks error by elaborating too fully on the Fourth Amendment implications of emerging technology before its role in society has become clear." City of Ontario v. Quon, 130 S. Ct. 2619, 2629 (2010). In light of Knotts's holding and Quon's admonition, it strikes me not so much as insufficiently circumspect as simply beyond our mandate to conclude that what is permissible when accomplished with a beeper is impermissible when accomplished with a GPS unit. I agree with the dissent, however, that nothing would preclude Congress from taking the important questions implicated by GPS technology and imposing answers. See also Orin S.

Kerr, The Fourth Amendment and New Technologies: Constitutional Myths and the Case for Caution, 102 MICH. L. REV. 801, 805-06 (2004) (arguing that Congress should be the primary driver of privacy protections when technology "is in flux"). Indeed, the unsettled, evolving expectations in this realm, combined with the fast pace of technological change, may make the legislature the branch of government that is best suited, and best situated, to act.

WOOD, Circuit Judge, dissenting. This case presents a critically important question about the government's ability constantly to monitor a person's movements, on and off the public streets, for an open-ended period of time. The technological devices available for such monitoring have rapidly attained a degree of accuracy that would have been unimaginable to an earlier generation. They make the system that George Orwell depicted in his famous novel, 1984, seem clumsy and easily avoidable by comparison. This court recognized in *United States v. Garcia*, 474 F.3d 994 (7th Cir. 2007), that "the meaning of a Fourth Amendment search must change to keep pace with the march of science." *Id.* at 997. We sensibly commented further in that case that we were not closing the door to future developments: "Whether and what

kind of restrictions should, in the name of the Constitution, be placed on such surveillance when used in routine criminal enforcement are momentous issues that fortunately we need not try to resolve in this case." *Id.* at 998.

Today we must decide whether to extend the rule announced in Garcia, which held that the attachment of a Global Positioning System, or GPS, tracking device on a car did not require a warrant—when the device was attached in public, it merely stored data, and it was retrieved in public—should be extended to a more sophisticated GPS tracker that transmitted at fourminute intervals information about the vehicle's location to a central monitoring office for 60 hours. My colleagues have decided that Garcia should be so extended. In doing so, they part company with the District of Columbia Circuit's thought-provoking opinion in *United* States v. Maynard, 615 F.3d 544 (D.C. Cir. 2010), reh'g denied sub nom. United States v. Jones, 625 F.3d 766 (D.C. Cir. 2010). With respect, I cannot take these steps. Although I part ways in some respects from the reasoning adopted by the D.C. Circuit, I would follow the ultimate conclusion announced in Maynard and find that the police cannot conduct a search using a device like the one here without first obtaining a warrant. I would therefore reverse the judgment of the district court.

I

I have no quarrel with a number of basic propositions on which the majority and the concurring opinions rest.

First, before the Fourth Amendment enters the picture at all, there must be something amounting to a search (or seizure). *Kyllo v. United States*, 533 U.S. 27, 31 (2001). Second, we must answer two questions in order to decide whether a protected search has taken place: (1) does the person have a subjective expectation of privacy under the circumstances; and (2) is that expectation objectively reasonable, or put differently, is it one that society should recognize. *Katz v. United States*, 389 U.S. 347, 360 (1967) (Harlan, J., concurring). We all agree that the only issue here is whether Cuevas-Perez's expectation of privacy met the second criterion. Third, a search is generally unlawful if not authorized by a warrant, unless one of the few delineated exceptions to the warrant requirement applies. See *Katz*, 389 U.S. at 357.

The majority appears to take the position that there is no "search" in any case where the government attaches even the most sophisticated GPS device to a vehicle in public and then activates that device so that the police may track every movement, minute-by-minute, whether the car is on a public road or parked in a private garage. That means that the Fourth Amendment, in their view, has nothing at all to say about the reasonableness of the surveillance. If the Fourth Amendment is out of the picture, then it makes no difference whether a police officer subjectively had a good reason to activate a device that he attached, if he acted on a whim, or if he was systematically using devices put on every car in a bad part of town to see where the drivers might be going. The best analogy is to the lack of regulation of the situation in which a police officer approaches a person

on a public street and asks a question. The officer might be asking the question because she is bored, because she finds the bystander attractive, because she forgot to wear her watch and is wondering what time it is, because she is suspicious of all persons of a particular ethnic descent, or because the person is behaving suspiciously. Her motivation is utterly irrelevant, as long as the encounter does not go beyond a consensual exchange of words. See United States v. Childs, 277 F.3d 947, 949 (7th Cir. 2002) (en banc). The same is true of GPS devices, under the majority's rule. Police officers could cruise the parking lots of shopping malls or the streets in one of Chicago's rougher neighborhoods, install GPSs randomly, and begin tracking any person they chose. As long as the Fourth Amendment has no application, nothing but the financial resources of the police department stands between the individual person and such tactics. I underscore this point at the outset because the majority does not apply any Fourth Amendment screen at all—not a "reasonable suspicion" rule, by comparison to Terry v. Ohio, 392 U.S. 1 (1968), and not the normal "probable cause" rule.

Recognizing that the majority, the concurrence, and I have no quarrel at the highest level of generality, I confine my observations here to decisions with a more direct bearing on our problem. At least five cases are pertinent: *United States v. Knotts*, 460 U.S. 276 (1983), *United States v. Karo*, 468 U.S. 705 (1984), *Bond v. United States*, 529 U.S. 334 (2000), *Kyllo v. United States*, 533 U.S. 27 (2001), and *City of Ontario v. Quon*, 130 S.Ct. 2619 (2010).

After reviewing them, I turn to this court's opinion in *Garcia* and the D.C. Circuit's opinion in *Maynard*.

In Knotts, the Supreme Court considered whether the Fourth Amendment required the police to secure a warrant before they could install a beeper in a drum containing chloroform, in order to trace the movements of the drum and thus find out where a suspected methamphetamine operation was located. The respondent, Knotts, did not challenge the installation of the device in the container; his complaint was limited to the government's use of the radio signals that the beeper transmitted. By modern standards, the signals were not particularly strong. As the Supreme Court described it, the investigating "officers followed the car in which the chloroform had been placed, maintaining contact by using both visual surveillance and a monitor which received the signals sent from the beeper." 460 U.S. at 278. In evaluating this arrangement, the Court reaffirmed its holding in *Katz* to the effect that the Fourth Amendment's reach does not turn upon either the presence or the absence of a physical intrusion into any given enclosure. Knotts, 460 U.S. at 280 (quoting Katz, 389 U.S. at 353). The activities of the officers in Knotts's case, the Court said, were no different from ordinary visual surveillance along the route that the driver of the car took. Id. No one could have thought otherwise: the officers were tailing the car, and the only effect of the beeper was to transmit more information to them than their unassisted eyes and ears could have gathered. Although the Court recognized that the officers visually lost track of the car for a short period of time and were able to locate it

again only by using the signal from the beeper, it found this fact immaterial because the officers could have tracked the car "relying solely on their naked eyes." *Id.* at 285. The Court dismissed Knotts's slipperyslope argument with the following comment:

[Knotts] expresses the generalized view that the result of the holding sought by the Government would be that "twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision." Brief for Respondent 9 (footnote omitted). But the fact is that the "reality hardly suggests abuse," Zurcher v. Stanford Daily, 436 U.S. 547, 566 (1978); 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. Ibid.

Id. at 283-84 (emphasis added).

The Court returned to this topic only a year later in *Karo*. There, it addressed two questions that *Knotts* had left open: the first dealt with the installation of the beeper device, and the second was "whether monitoring of a beeper falls within the ambit of the Fourth Amendment when it reveals information that could not have been obtained through visual surveillance." 468 U.S. at 707. Interestingly, the government had obtained several court orders in the case, including one authorizing the installation and monitoring of the beeper in a container of ether that was destined to be used in a cocaine operation. As the case reached the Supreme Court, however, concerns with these orders led the Court to assume that both

the installation and monitoring were handled without a warrant. The installation itself was of no interest: federal authorities had placed it in their own container, and they later substituted that container for one of respondent Karo. As in our case, the hard question related to the agents' monitoring. As the Court put it, "[i]t is the exploitation of technological advances that implicates the Fourth Amendment, not their mere existence." *Id.* at 712.

Knotts, the Court underscored, had been a case in which both the movements of the automobile and the arrival of the container could have been observed by the naked eye. Id. at 713. In contrast, Karo "present[ed] the question whether the monitoring of a beeper in a private residence, a location not open to visual surveillance, violates the Fourth Amendment rights of those who have a justifiable interest in the privacy of the residence." Id. at 714. Providing a helpful illustration that demonstrated the limits of the *Knotts* holding, the Court answered its own question in the affirmative and found a Fourth Amendment violation. In Karo, the reason why the key information could not have been obtained through visual surveillance was because it was collected inside a private residence to which the agents had no lawful access. That is the reason why the Court paid particular attention to the sanctity of the home, but its later comments make clear that it was not establishing a rule limited to in-home searches. To the contrary, it squarely rejected the government's argument that "traditional justifications for the warrant requirement are inapplicable in beeper cases." Id. at 717. "[T]o a large

extent," the Court continued, "that argument is based upon the contention, rejected above, that the beeper constitutes only a minuscule intrusion on protected privacy interests." *Id*.

Any doubt that the Fourth Amendment continues to have force outside the home should have been put to rest by the Supreme Court's decision in Bond. In that case, the Court held that a Border Patrol agent's physical manipulation of a bus passenger's carry-on suitcase, which had been placed openly in the overhead compartment of a common-carrier bus, violated the constitutional prohibition against unreasonable searches. 529 U.S. at 335. The government had argued that by exposing his bag to the public Bond lost any reasonable expectation of privacy in it. Id. at 337. In rejecting that position, the Court focused on how intrusive, as a practical matter, the invasion of privacy was. A "probing tactile examination," id., of the carry-on luggage was more intrusive than a normal person would expect. The agent's action, the Court concluded, violated the Fourth Amendment.

The Court demonstrated in *Kyllo* that it has not consigned *Karo* and *Bond* to the dustbin. *Kyllo* presented the question whether the Fourth Amendment was violated by law enforcement's use of a thermal-imaging device aimed at a private house from a public street with the purpose of investigating whether the heat being emitted from the house was consistent with an illegal marijuanagrowing operation. Like the beepers in *Knotts* and *Karo*, and like the GPS system used in Cuevas-Perez's case, the thermal-imaging device took advantage of new tech-

nology to enhance the observational powers of the police. Writing for the Court, Justice Scalia began his analysis with the observation that "the antecedent question whether or not a Fourth Amendment 'search' has occurred is not so simple under our precedent." 533 U.S. at 31. For the search of a home, he continued, the analysis is no longer tied to common-law trespass. *Id.* at 31-32. And, demonstrating a cautious, case-by-case, approach to the matter, the Court noted that it had "previously reserved judgment as to how much technological enhancement of ordinary perception" from a vantage point on a public street "is too much," if it is the home that is being searched. *Id.* at 33. It concluded as follows:

Where, as here, the Government uses a device that is not in general public use, to explore details of the home that would previously have been unknowable without physical intrusion, the surveillance is a "search" and is presumptively unreasonable without a warrant.

Id. at 40.

The last Supreme Court decision that is pertinent to our case is *Quon*, in which the Court had to decide whether a public employee had a reasonable expectation of privacy in text messages that he sent and received on a pager that his employer owned and had issued to him. In the end, it found in favor of the employer, but it refrained from making any sweeping statements. As before, the Court chose instead a measured approach, commenting that it had to "proceed with care when considering the whole concept of privacy expectations

in communications made on electronic equipment owned by a government employer. The judiciary risks error by elaborating too fully on the Fourth Amendment implications of emerging technology before its role in society has become clear." 130 S.Ct. at 2629. The Court also acknowledged that "[r]apid 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." Id. Importantly, the Court did not assume that the potential of new technologies to threaten privacy inevitably lessens reasonable privacy expectations. To the contrary, the Court emphasized that this was an open question, noting that the pervasiveness of cell phone and text messaging technology "might strengthen the case for the expectation of privacy." See Quon, 130 S.Ct. at 2630. It is notable for our purposes that it made this point not in a case involving a search within a home, but in a case involving Fourth Amendment rights in a public workplace. In the end, the Court assumed for the sake of argument that the employee did have a reasonable expectation of privacy in his text messages and that the employer's review of a transcript of the messages amounted to a search for Fourth Amendment purposes. It found, however, that the search was justified by the special needs of the workplace and was not excessive in scope, and so it found no constitutional violation. Id. at 2632.

Before turning to this court's decision in *Garcia* and the relevant part of the D.C. Circuit's decision in *Maynard*, it is worth underscoring several points that emerge

from the Supreme Court's cases. First, contrary to the assumption in the concurring opinion, the Court has never considered the Fourth Amendment implications of the kind of GPS device that was used in Cuevas-Perez's case—a device whose capabilities are so far beyond anything the Court saw in *Knotts* that we have difference in kind, not just a difference in degree. There is thus no escaping the question of how to extend these earlier Supreme Court rulings to a new situation. See Quon, 130 S.Ct. at 2635 (Scalia, J., concurring) ("Applying the Fourth Amendment to new technologies may sometimes be difficult, but when it is necessary to decide a case we have no choice."). This is therefore not a case like State Oil Co. v. Khan, 522 U.S. 3 (1997), in which a lower court has before it an old question (there, whether maximum resale price maintenance agreements are subject to antitrust's per se rule of illegality) that the Supreme Court had long since resolved. Second, the Court itself has emphasized repeatedly the contextual nature of the Fourth Amendment inquiry. It has eschewed rigid rules, especially (as both *Kyllo* and *Quon* illustrate) where new technologies are involved. And, taken together, even *Knotts* and *Karo* show that certain uses of beepers (and by extension successor technologies that perform similar functions) may infringe legitimate expectations of privacy sufficiently to trigger Fourth Amendment protections.

In *Garcia*, this court was asked to decide whether the initial placement without a warrant of a GPS tracker on the defendant's car violated his Fourth Amendment rights. At the time the device was affixed, the car was parked on a public street; the court assumed that it was

also on a public street when the police retrieved it. Contrary to the majority's suggestion, see ante at 4-5 n.2, the defendant did not make a separate argument focusing specifically on the monitoring made possible by the GPS unit. (The majority implies that it would have been almost silly to distinguish between the attachment of the device and its later activation and use for monitoring, but I find nothing absurd in such a distinction. The line of cases I have just reviewed plainly shows that privacy interests are normally triggered through monitoring, not through the simple installation of the device that the police use. And it is routine for this court to refuse to reach out and decide issues that are not pressed by the parties.) In Garcia, we said that the GPS device was a substitute for an activity—following a car on a public street—that is not protected by the Fourth Amendment, and that the use of the GPS tracker did not transform that activity into something illegal. 474 F.3d at 997. Even so, we acknowledged that the new technologies differ significantly from the older ones used by the police. "The new technologies enable, as the old (because of expense) do not, wholesale surveillance." Id. at 997-98. We therefore recognized that certain uses of GPS devices, such as mass surveillance, might raise a question under the Fourth Amendment. The Garcia opinion hints, interestingly, that individualized suspicion may differentiate what is permissible under the Fourth Amendment from "mass surveillance." *Id.* at 998. The police of Polk County, we said, had "abundant grounds for suspecting the defendant." Id. For all of those reasons, we rejected the defendant's challenge to the use of the GPS device.

Of the several cases around the country that have arisen in this area, the most thoroughly reasoned is that of the D.C. Circuit in Maynard. There, just as in Garcia, the court had to decide whether evidence acquired through the warrantless use of a GPS device should have been suppressed. The police had attached the device to defendant Jones's Jeep without first obtaining a warrant. They then proceeded to track the defendant's movements 24 hours a day for four weeks. Judge Ginsburg's opinion for the court began by distinguishing this kind of search from the one that the Supreme Court had considered in Knotts. Maynard, 615 F.3d at 556. He pointed out that the careful language in Knotts that reserved for future consideration the constitutionality of more extensive searches was not limited to the mass-surveillance problem. To the contrary, the Court was also addressing "the defendant's argument that, if a warrant is not required, then prolonged 'twenty-four hour surveillance of any citizen of this country will be possible, without judicial knowledge or supervision." Id. (quoting Knotts, 460 U.S. at 283). The GPS device in Maynard, the court found, exposed information about the defendant to the public that would not otherwise have been discovered:

Two considerations persuade us the information the police discovered in this case—the totality of Jones's movements over the course of a month—was not exposed to the public: First, unlike one's movements during a single journey, the whole of one's movements over the course of a month is not *actually* exposed to the public because the likelihood anyone will observe all those movements is effectively nil.

Second, the whole of one's movements is not exposed *constructively* even though each individual movement is exposed, because that whole reveals more—sometimes a great deal more—than does the sum of its parts.

615 F.3d at 558. "Prolonged surveillance," it concluded, "reveals types of information not revealed by shortterm surveillance, such as what a person does repeatedly, what he does not do, and what he does ensemble." Id. at 562. Continuing, the court found that "[a] reasonable person does not expect anyone to monitor and retain a record of every time he drives his car, including his origin, route, destination, and each place he stops and how long he stays there In this way the extended recordation of a person's movements is, like the 'manipulation of a bus passenger's carry-on' canvas bag in Bond, not what we expect anyone to do, and it reveals more than we expect anyone to know." 615 F.3d at 563 (quoting Bond, 529 U.S. at 339). Finally, following such decisions as Katz, Bond, and Kyllo, the court concluded that the defendant's expectation of privacy (in the sense of freedom from prolonged GPS monitoring) was objectively reasonable. Id. at 563-64.

II

In many ways, Cuevas-Perez's case bears a strong resemblance to *Maynard*. Agents of Immigration and Customs Enforcement ("ICE"), working with the Phoenix police department, watched Cuevas-Perez's movements for several days, because they believed that he

was smuggling cocaine. After a camera revealed that he was fiddling around with the hatch and rear door panels of his Jeep SUV, they decided to attach a batterypowered GPS unit to the vehicle. Their intention was to see where Cuevas-Perez went and to try to develop evidence supporting their suspicions. In other words, at the critical time (as events were unfolding, in preparation for their planned surveillance), they intended to leave the GPS device on the car for an indefinite period of time and conduct a search, just as the agents in Maynard did. (To the extent that the court in Maynard might be understood as taking an ex post view of the reasonableness of the surveillance, I must respectfully disagree with it. The need for a warrant must be ascertained at the outset, not with the hindsight of two days' or four weeks' experience. See United States v. Grubbs, 547 U.S. 90, 95 (2006). I note as well that the concurring opinion, ante at 16, criticizes my position for focusing on the intent of law enforcement at the time the device was affixed. But that is always the time when the need for a warrant or other justification for a search is ascertained. The search that follows after the warrant is issued—or in this case the surveillance that followed after the installation of the device—gives rise to an actual invasion of privacy, not a potential one.)

The GPS unit that Detective Matthew Shay attached to Cuevas-Perez's Jeep was, as the majority concedes, designed to provide constant real-time information about the location of the vehicle to the monitoring officer. Using satellite technology, it would send a text message pinpointing where the vehicle was to the mother computer

as often as once every minute. The unit could be, and was, monitored from the comfort of the police officer's desk computer. Hoping to conserve battery life, Detective Shay decided to program it to provide location information only once every four minutes. With this information, the detective had exactly the kind of detailed information about Cuevas-Perez's movements as the authorities did in Maynard. (Interestingly, and contrary to the majority's assumption, the surveillance was not necessarily limited to his movements on public roads. Cars are commonly driven and parked on private property, and many popular vehicles like Cuevas-Perez's Jeep are used off-road. This is just another way in which the GPS empowers the police to conduct much more intrusive surveillance than they could manage with earlier technologies.) The only difference between the two cases is that the battery in the device used on Cuevas-Perez's Jeep did not last as long as Detective Shay had expected. At the time Shay realized this, Cuevas-Perez had driven quite a distance, through Arizona, New Mexico, the Texas panhandle, Oklahoma, Missouri, and part of Illinois. To the extent that it is relevant, the majority's assertion that Cuevas-Perez's movements in this case can be categorized as a "single journey" under Maynard's reasoning, see ante at 6-7, is simply untenable. A commonsense definition of a "single journey" encompasses, as the D.C. Circuit observed, a trip from one's home to the market, not a 60-hour odyssey across 1,650 miles as was the case here. See 615 F.3d at 560. More to the point, for all we know, Shay may have intended to monitor the Jeep for the same four-week period that the D.C. Circuit

evaluated in *Maynard*. It would not be the first time that police conducted extended surveillance of a drug dealer to find out who else was involved in the illegal activity. But that option disappeared along with the battery life.

Hoping to salvage the operation, Shay got in touch first with the Missouri police and then with the Illinois State Police and asked for assistance. ICE agents asked the Illinois police to stop the vehicle, if they could develop independent probable cause to do so (in other words, if they could catch Cuevas-Perez in any kind of traffic violation). And that is just what the Illinois State Police did. Trooper Faulkner found Cuevas-Perez in the passing lane and arrested him for failing to return to the right lane within a reasonable time, as required by 625 ILCS 5/11-701. The rest is history. A trained dog alerted to the presence of illegal drugs; officers searched the Jeep and found the heroin; Cuevas-Perez was arrested; and this criminal prosecution followed.

III

The lesson that I draw from the governing law that I have reviewed, as applied to the facts of Cuevas-Perez's case, is that the police should have obtained a warrant before they activated the GPS device that they had affixed to the Jeep and began monitoring it. As I have already explained, this does not require us to revisit the holding of *Garcia*, since that case involved only the act of placing the GPS device on a car that was out in public. I agree with my colleagues that cases such as *Karo* direct us to

find that the simple attachment of a device on an unattended car out in public is not invasive enough to trigger the warrant requirement. 468 U.S. at 712 (observing that "a policeman walking down a street carrying a parabolic microphone capable of picking up conversations in nearby homes" does not engage in a search when the microphone is off). The monitoring, however, is qualitatively different, as we can see from the closely analogous line of cases dealing with wiretapping.

Recall that the issue in Katz concerned electronic surveillance of a telephone conversation through modernized wiretap technology. In overturning Olmstead v. United States, 277 U.S. 438 (1928), the Court concluded that the "Government's activities in electronically listening to and recording the petitioner's words violated the privacy upon which he justifiably relied . . . and thus constituted a 'search and seizure' within the meaning of the Fourth Amendment." Katz, 389 U.S. at 353. How the wiretap was installed, Katz held, and whether it involved a trespass, no longer determined whether the government had conducted a search. Only a few months earlier, the Court in Berger v. New York, 388 U.S. 41 (1967), had invalidated on Fourth Amendment grounds a New York statute authorizing the use of wiretaps. There, the Court observed that "[f]ew threats to liberty exist which are greater than that posed by the use of eavesdropping devices." Id. at 63. Noting the widespread use of wiretaps by law enforcement authorities, the Court counseled that "techniques and practices may well be developed that will operate just as speedily and certainly and—what is more important—without attending illegal-

ity." *Id.* These cases recognize that the monitoring of private communications—even a conversation in a public phone booth discussing unlawful activity—invades an individual's reasonable expectation of privacy. See *Katz*, 389 U.S. at 348. The next year, Congress passed Title III of the Omnibus Crime Control and Safe Street Act of 1968 to regulate wiretapping activity in accordance with Fourth Amendment principles. All of this built on the foundation the Court laid in *Katz*, and so it is to that foundation I believe we should turn in the present case.

Prolonged GPS surveillance, like a surreptitious wiretap, intrudes upon an individual's reasonable expectation of privacy by revealing information about her daily trajectory and patterns that would, as a practical matter, remain private without the aid of technology. This sort of constant monitoring at a personal level gives rise to precisely the "dragnet" effect the Supreme Court identified in *Knotts* and decried years earlier in *Berger*. See Berger, 388 U.S. at 65 (Douglas, J., concurring) ("The traditional wiretap or electronic eavesdropping device constitutes a dragnet, sweeping in all conversations within its scope It intrudes upon the privacy of those not even suspected of crime and intercepts the most intimate of conversations."). An officer's monitoring of a person's every movement, as revealed by a GPS tracking device, is comparable to the monitoring of phone lines to intercept that person's telephone conversations. In my view, both qualify as a search under the Fourth Amendment and both require the government to secure a warrant before the surveillance begins (or to show that

an independent exception to the warrant requirement applies). As it did in the wiretap context, Congress could of course enact legislation to regulate GPS surveillance.

To conclude that open-ended, real-time GPS surveillance is not a "search" invites an unprecedented level of government intrusion into every person's private life. The government could, without any metric of suspicion, monitor the whereabouts of any person without constitutional constraint. Under the majority's view, such surveillance is tolerable. And because the Fourth Amendment protects individual rights, see District of Columbia v. Heller, 128 S.Ct. 2783, 2790 (2008), it is not clear why the use of GPS technology for mass surveillance would trigger the warrant requirement if the suspicionless surveillance of an individual does not. Thus, not only is the indefinite GPS surveillance of a single person permissible; the government could also keep tabs on entire communities, perhaps with the hope of identifying hints of criminal conduct. Under the majority's framework, GPS tracking of all cars in a high-crime area is as unremarkable as an officer on the beat posing a polite question to a local resident. All of this can occur solely at the whim of a governmental actor, and there would be no requirement to demonstrate any suspicion of wrongdoing to a neutral magistrate.

The irony here is that the police may well have had probable cause to conduct this intimate surveillance of Cuevas-Perez, based on the investigation they had already conducted. Applying the principles from the

wiretap cases to the situation before us, we should recognize that a "search" for Fourth Amendment purposes was taking place from the moment when the police began monitoring this particular GPS device—one which, as I have stressed, was capable of transmitting minute-byminute information, 24 hours a day. The approach that I propose avoids any inappropriate reliance on hindsight; it recognizes that GPS devices entail a level of intrusiveness on privacy expectations comparable to that of wiretaps; and it thus concludes that society should be prepared to recognize as reasonable the expectation that the police will not secretly be monitoring every movement of one's car. Finally, my approach places no greater burden on the police to outline their reasons for the planned surveillance than they bear in wiretap cases. I conclude that Detective Shay conducted a search during the time when he used this particular GPS unit to monitor Cuevas-Perez's location. Without a warrant, the search was unconstitutional.

I respectfully dissent.