

Privacy in the Balance



Do scientific advances render our traditional notions of privacy obsolete?

By Kenneth Lerner

Do we control technology, or does it control us? Does the protection of the Fourth Amendment — which guarantees us the right to be free from unreasonable searches of our homes — yield to scientific advances that render our traditional notions of privacy obsolete, and our walls superfluous? These were the underlying philosophical questions in the case of *Kyllo v. United States*, a case I argued in February 2001 before the United States Supreme Court. Unfortunately, these philosophical issues were not in sharp focus during the oral argument.

The case involved a man suspected of growing marijuana in his Florence, Ore., home. The investigators called out the National Guard to use a thermal imager to view heat sources emitting through the walls and roof of the house. Thermal radiation is invisible to the naked eye although every object in the universe is constantly radiating thermal energy to varying degrees. The thermal imager can convert this invisible energy to a visible picture, appearing much like a photographic negative with white areas representing the radiation of more intense heat. At Mr. Kyllo's house, the imager was able to detect three distinct circles of light along the top of the roof of his house, which informed the officers that Kyllo

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was probably using high intensity lights in that location of his house. A search warrant was later obtained, and the search revealed these high-intensity lights hanging from the rafters of Kyllo's attic, providing ultraviolet light for a marijuana garden.

The issue brought before the court was whether the use of thermal imaging technology was itself a search of Kyllo's house, which should have required a warrant in advance. Four federal circuits had already determined that no warrant was required and that thermal image scanning did not constitute a "search" as that term is used in the United States Constitution. Three state supreme courts, several federal district courts and two circuit court panels (these panel decisions were

later reversed or vacated) held that thermal imaging was a violation of the Fourth Amendment. In this case, the Ninth Circuit had found, in a 2-1 decision, that thermal imaging was an unconstitutional search. However, on rehearing one of the judges in the majority resigned for health reasons. His replacement had a different view, switching the 2-1 majority to a conclusion that thermal imaging was not a search at all. The Supreme Court granted certiorari in order to resolve this conflict.

The traditional test to determine whether a search has occurred under the Constitution is taken from *Katz v. U.S.*, 389 U.S. 347, 361 (1967). This test imposes a two-fold requirement, first that a person exhibit an actual (subjective) expectation of privacy and, second that the expectation be one that society is prepared to recognize as reasonable. The Supreme Court has historically held that the sanctity of the home is not to be disputed and that the overriding respect for the sanctity of the home has been embedded in our traditions since the origins of our republic. *Payton v. New York*, 435 U.S. 573, 601 (1980). Therefore, a person has a right to retreat into his home and there be free from unreasonable government intrusion. *Silverman v. U.S.*, 365 U.S. 505, 511 (1961).

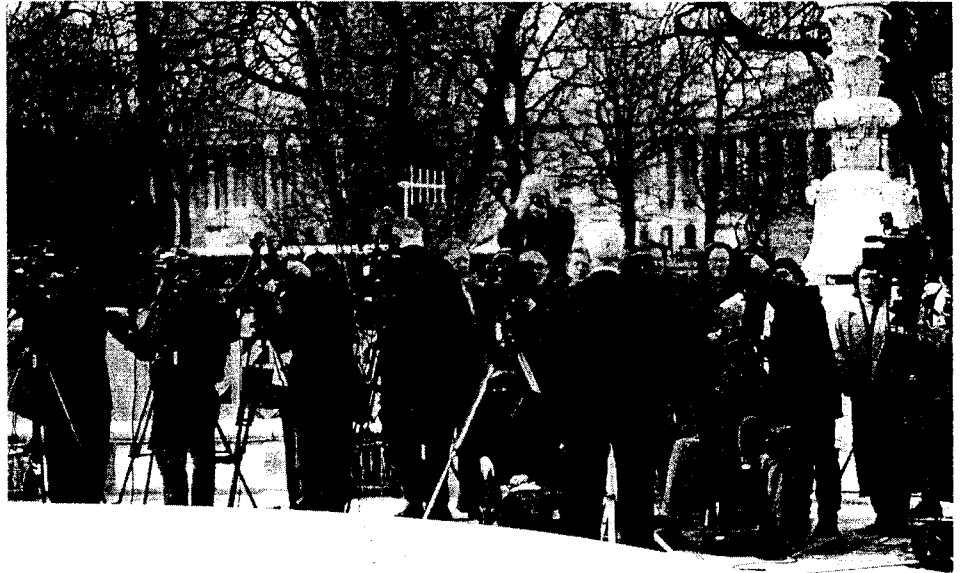
Based on this precedent, Kyllo cer-

tainly had a right to subjectively expect privacy for the activities that he conducted inside of his home. And since every person has the right to retreat into his or her home and be free from governmental intrusion, his expectation of privacy was clearly one that society would regard as reasonable. But the government disagreed, asserting that the thermal imager does not really enter the house, and that the police are free to observe whatever they want from outside, even with technological enhancement. Further, it argued that thermal imaging does not reveal a specific enough level of detail worthy of citizen concern or constitutional protection.

Should the government be able to detect the invisible byproducts of our protected activity simply because the laws of thermodynamics dictate that heat will inevitably be absorbed and radiated through the walls of any structure? Is there a core value of privacy which the Constitution protects, or must we as citizens cope with a shrinking zone of privacy as technology advances and is able to detect more and more of the invisible byproducts of our existence?

I took the position that when any technology is used to reveal private information about the interior of the home that could not have been gathered from a normal vantage point outside with the human senses alone, a search occurs. Although this point was drawn almost verbatim from the Court's decision in *United States v. Karo*,¹ it was met with incredulous questions from several of the justices, who asked whether the use of eyeglasses, binoculars, flashlights or thermometers would constitute a search.² I was even asked to give a fallback position if the Court did not agree with my view.

The *Karo* view makes good sense. Certainly one cannot reasonably expect privacy for activities that are knowingly exposed to view even if the activity is occurring within the home. One cannot parade in front of an open window or fail to draw the blinds while standing in front of



*OSB member Ken Lerner (back to camera) answers questions from news reporters on the front steps of the U.S. Supreme Court building following his oral arguments in *Kyllo v. United States*.*

windows and still expect to be unseen. One may not leave the door open while talking loudly or playing music and expect to not be heard. It would be natural for any passerby to hear or see such activities occurring within the home. Further, if the activity is visible or audible from outside the home, the use of technology to enhance that view would not be an unconstitutional search because it would reveal no more than what had been exposed to view. On the other hand, the use of technology to discover what could not have been seen or heard from a normal vantage point by the general public³ does constitute a search, because it intrudes upon a reasonable expectation that activity occurring within our home will not be discovered when it is *not* knowingly exposed.

Many of the incredulous questions posed by the justices implied a blanket approval of commonly available technology without any further legal analysis, under the assumption that the citizen has some burden to take such technology into account and take steps to guard against it. The willingness to make this assumption

turns the basic premise of the Fourth Amendment on its head. Instead of primarily restraining the government from unreasonable searching, the Court seems more willing to ask why the citizen should not have done more to protect privacy.

This certainly makes some sense in terms of the window example above. If something can be seen through the window, binoculars may be used to magnify it, or a flashlight used to illuminate it, and the citizen *should* pull the blinds if privacy is desired. But converting this into a blanket *per se* rule, that the use of magnification and illumination is not a search under *any* circumstance simply because of common availability, is a giant leap and undermines legitimate expectations of privacy. It not only takes the focus off of what is being knowingly exposed, it shifts the burden to the citizen to be on guard under any circumstances, even at home where one is entitled to be free from government scrutiny. If the use of illumination, regardless of the position from which it is used, is not a search, may the police then use a robotic crane to shine lights into upper story windows, and then



use binoculars to read what may be seen on a desk? Most citizens would likely be outraged by such an intrusion, but this would be a logical extension of a blanket approval of those common technologies.

There is another, perhaps deeper problem with the "commonly available" gloss that some of the justices seemed prepared to graft onto the Fourth Amendment. It subtly eats away at the constitutional protection of the home because ultimately the common availability of technology will dictate how much privacy the Court will determine we are entitled to expect. This necessarily will shrink the zone of privacy, engender a state of paranoia and will encourage society to become more closed in the effort to gain privacy over the myriad invasive techniques that currently do, and in the future will, exist. Ultimately, the citizens will lose this privacy battle, or only those with the economic means will be able to insure a measure of privacy while the poor will not. Did the Framers of the Constitution intend that the freedom from unreasonable searches be a commodity to be bought, or the subject of a technological arms race? Sadly, the "expectation of privacy" test can be a means for eroding our essential privacy rights unless anchored to a core value that the Framers sought to protect.

Perhaps the most problematic aspect of the common availability test is an underlying assumption that the citizen has at hand some ready and easy means of protecting privacy. But this is not the case with technologies such as thermal imaging, which detect invisible phenomenon that cannot be contained. Consequently, there is very little that the citizen can do to maintain privacy. Permitting the indiscriminate use of these technologies simply because they are known, or even become commonly available, would impose an impossible burden upon the citizen to preserve any measure of privacy. To be sure, thermal imaging is only one of many sophisticated technologies which are being implemented as surveillance devices. While thermal imaging operates on the



Ken Lerner stands on the famous ceremonial steps to the Supreme Court with his wife, OSB member Katherine McDowell, and their daughter, Natalie. Lawyers actually enter through the side entrance, "as if in secret."

thermal infrared range of the electromagnetic scale, and does not give clear definition of people or objects through walls, it does reveal thermal energy being radiated from a structure. There are other parts of electromagnetic scale which permit millimeter wave technology to gain clear images of people inside of buildings through walls.⁴ There are low pulse radar technologies that can provide clear pictures of the interiors of homes and rooms from outside. Parabolic microphones can gather conversations from a distance using the vibrations of windows. Is this type of scientific surveillance unconstitutional searching? The Supreme Court will give us some indication when it decides the *Kyllo* case sometime this spring.

THINKING BACK ON ARGUMENT DAY

Preparing for the Supreme Court was like preparing for no other case I have ever had. I have never been so im-

mersed in the details of a particular area of law as I was for this argument. Consequently, I did not feel nervous about my ability to perform or answer questions, but was more anxious about what the experience would be like.

I was gratified that friends and family wanted to come to the Supreme Court to watch this moment and to share it with me. I wanted to do them proud. Figuring out where we should all go for dinner, though, added a different sort tension and distraction.

I will never forget driving to the Supreme Court in a limousine with my family, listening to Nina Totenberg on National Public Radio talk about the case that I was about to argue.

The Supreme Court is a monumental building that is inspiring in its grandeur. It is quite odd that the lawyers who come to argue their cases there do not enter by walking up the famous ceremonial steps to the Court. The lawyers enter through the side entrance as if in secret.

There are an amazing number of blue-coated security officers, far more than one would see in the local district court. The courtroom, and the rules and decorum of the court, are closely guarded. Those in the audience may not have papers or pens. It seems odd that decorum is so strictly enforced for the litigants and observers while the justices themselves at times display so much less of it than they demand.

The clerk of the court met with the lawyers in the lawyers' lounge before the arguments took place and gave us some friendly tips and basic advice about how to handle our case. One of the things that he told us was that the lawyers' podium in front of the justices has a crank handle so that it can be elevated or let down depending on the height of the attorney. Of course, the first thing that I did was approach the podium and crank the handle, finally adjusting it to the place where I felt most comfortable.

The clerk also invited us to take the ceremonial quill pens that were on the



desks as souvenirs from our argument. I had always thought these would be rare treasures until I saw them for sale for \$2.50 in the Court's gift shop.

My case was one involving issues of high technology, and the primary evidence was a videotape of heat emissions captured by a thermal imaging device. It was a little disheartening to find that our courts of appeals and Supreme Court are decidedly low tech and do not have the ability to play a videotape in the courtroom. Consequently, it is very difficult to demonstrate to the justices exactly what one wants them to look for.

It was an exciting honor for me to move the admission of my law partner, Gail Meyer, before the United States Supreme Court. I was both embarrassed and delighted to have John Henry Hingson carrying my briefcase inside the Supreme Court.

Thirty minutes can go by very fast. No matter how many moot courts I had done, I was still a little unprepared for the tone and persistence of the justices' questions.

I found that there were too many questions and interruptions from the justices to have a reasonable discourse or flow about any particular issue. I was somewhat surprised to feel as if my answers were coming out in soundbites rather than as part of a reasoned discussion.

It seemed as though the different factions of the Court were trying to talk to each other through me by asking me hard questions. I wondered whether they talked with each other very much. I did not get the feeling that they liked each other.

I came away from the experience feeling that the briefs were much more important than the oral argument and that the argument needs to be used to make some critical points. If I were to do this over again, I would prepare a little differently and be ready to do battle with the justices rather than attempt to have a reasoned discourse with them. I would try harder to get my "zingers" in whenever I found an opportunity, even though the

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Court and the clerk instruct the attorneys to directly answer the justices' questions.

I found many of the hypothetical questions that the justices asked to be quite extreme, bordering on ridiculous. I also felt that the justices, through their questioning and expression of sentiment, were quite removed from what the common citizen feels, thinks or believes.

My case was about the privacy of the home and how technology can invade that privacy. When discussing some of the nuances that I felt applied, I was taken aback by one of the justices asking what my fall-back position would be. I felt at that moment that I was being asked to compromise the privacy of every citizen in the United States. I did not have a fall-back position.

I was quite surprised to hear how willing several justices were to allow intrusions into our homes with flashlights, binoculars and other forms of technology without much analysis under the existing legal test and framework.

I made the mistake of thinking that Justice Scalia might be a persuadable vote. I was surprised that the justices did not want to talk more openly about the legal test that should apply in this area, and by the lack of philosophical inquiry. It seemed odd that some justices did not want to acknowledge that this technology, and how it can be used, is just the tip of the iceberg.

I found my mind spinning after I sat down and was unable to focus very clearly during the government's argument. I had a hard time formulating what I wanted to say in rebuttal.

I was quite surprised by the level of media attention that this case received even though I had long felt it was an important issue. I was particularly surprised to see a semicircle of microphones and cameras waiting for me when I came out of the Supreme Court. It was with a mixture of mischievousness and exhaustion that I let them wait while we took personal photographs on the steps of the Court.

I could not have performed as well as I did without the help and assistance of so many other people including the federal public defenders in Oregon and the attorneys in Washington, D.C., from the law firm of Sidley & Austin. ■

ABOUT THE AUTHOR

Kenneth Lerner practices criminal defense law in state and federal courts in Oregon. He is a partner in the Portland firm of Lerner & Meyer, which specializes in the defense of criminal cases, federal and state cases and personal-injury cases. Lerner is a former public defender, past recipient of the Joyce Ann Harpole Award and a current member of the OSB House of Delegates.

ENDNOTES

1. "For purposes of the [Fourth] Amendment, the result is the same where, without a warrant, the Government surreptitiously employs an electronic device to obtain information that it could not have obtained by observation from outside the curtilage of the house." 468 U.S. 705, 715 (1984).

2. A commentator on the "News Hour With Jim Lehrer" (McNeil/Lehrer News Hour) characterized my position as too broad for the Court to accept, even though the words I used were from a Supreme Court opinion.

3. This qualification is also grounded in prior Supreme Court cases that require the observation to be made from a lawful vantage point, one generally used by the public in its ordinary course. *California v. Ciraolo*, 467 U.S. 207, 213 (1986); *Florida v. Riley*, 488 U.S. 445, 449-50 (1989).

4. Testimony before the House Judiciary Subcommittee on Crime and Criminal Justice, July 21, 1994. 1994 WL 14190555, at p. 5.

This backscatter X ray spotted 37 illegal immigrants being smuggled out of Chiapas, Mexico, in a shipment of bananas

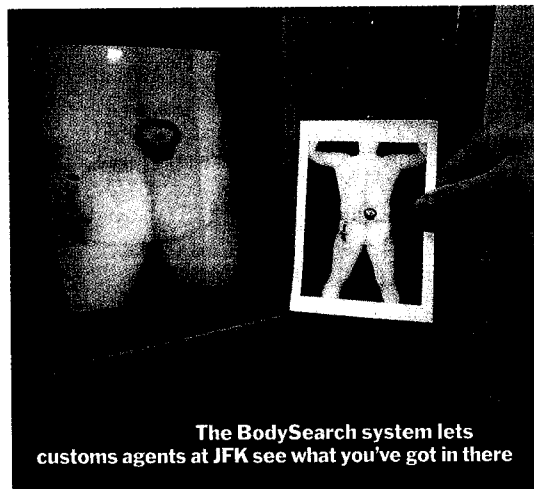
X-RAY VISION

A surprising Supreme Court ruling sheds light—and other beams—on the latest snooping technology

By IVAN AMATO

THE TECHNOLOGY THAT THE NINE JUSTICES of the Supreme Court wrestled with last week was relatively crude: a heat-sensing gun pointed at a house in Florence, Ore., by federal agents on the lookout for homegrown marijuana. In 1992, a cop using the device had spotted a lot of excess heat coming off high-intensity grow lights. Police searched the house, found more than 100 plants and arrested one of its occupants—a small-time marijuana grower named Danny Kyllo. Kyllo appealed the case all the way to the highest court, arguing that by using infrared technology to pry into his home, the government had conducted an unconstitutional search.

To the surprise of many court watchers, the majority ruled in Kyllo's favor. And the dissenting Justices in the 5-4 decision made it clear that even if they were willing to accept "off-the-wall" technologies like infrared guns—which can pick up signals only from the outside of a building—they viewed with alarm newer "through-the-wall" devices that can see inside.



The BodySearch system lets customs agents at JFK see what you've got in there

enough to raise thorny privacy issues for all of us. Among the leading contenders:

X-RAY VISION Today's preferred technology for looking through things is the same one Wilhelm Roentgen used to photograph the bones in his wife's hand in 1895, although the newest X-ray devices are considerably more powerful. Last September, for example, the U.S. Customs Service placed an order worth more than \$25 million for 15 truck-based X-ray inspection systems made by American Science and Engineering, Inc., in Billerica, Mass. Using a technique in which images are made from X rays scattered back from objects (rather than passing through them), AS&E's systems can spot—with extraordinary clarity—guns, drugs, plastic explosives and other contraband, even when hidden, say, in the middle of a fully packed banana truck. One of the company's products, called BodySearch, reveals ghostly images of weapons and whatever else—including genitals—might be hidden underneath your clothes.

RADAR FLASHLIGHTS

Through the wall? Yes, indeed. A whole new generation of surveillance technology has been developed since Kyllo was busted. Some of these new devices are already turning up at airports, prisons, border crossings and crime scenes. And while none of them is quite up to the standards of, say, Superman, they can see through clothing and peer into private homes well

Gene Grenaker, a radar expert at Georgia Tech, was fiddling with a radar gun he had developed for monitoring marksmen and archers during the 1996 Atlanta Olympics when he noticed something odd: whenever someone walked on the other side of his laboratory wall, a deflection appeared on the radar screen. One thing led to another, and now Grenaker is trying to

smooth out the final kinks in his Radar Flashlight, a device that looks like an over-size hair dryer but can penetrate 8-in.-thick nonmetal doors and walls. When radar waves encounter moving objects, like a hostage taker's nervous pacing or heaving diaphragm, the motions are translated into a bar of LED lights in which the height of the bar corresponds with the amount of movement in the room. In more sophisticated radar detectors, like the RadarVision 2000 prototype made by Time Domain Corporation of Huntsville, Ala., the crude LED display is replaced by dancing circles and colored blobs that show both the location and trajectory of moving objects on the other side of an opaque barrier.

BEYOND BAR GRAPHS Some firms are pushing for yet more clarity. Using shorter-wavelength radar waves measured in millimeters, not centimeters, Millivision in Amherst, Mass., makes a device that goes well beyond colored blobs. "What we are doing is real imaging," says Richard Huguenin, chief technology officer. "You see a picture." Actually, it's more like a shadow. The human body, as it turns out, naturally emits millimeter radiation that goes right through clothes. So anything blocking that emission, such as a concealed gun or wallet, shows up as a shadow in the images produced by Millivision's prototype scanners. Huguenin acknowledges the privacy concerns, but he argues that the technology's public-safety benefits outweigh them. "You can tell the boys from the girls" with his device, says Huguenin, "but you usually can anyway."

The Supreme Court was clearly more troubled by the privacy issues than Huguenin. The majority opinion explicitly used the heat-detector case to draw what Justice Antonin Scalia called a firm, bright line blocking the use of this and future imaging technologies to peer into the home or any other place where an individual might have a reasonable expectation of privacy.

But the court also left the police a couple of outs. The first is to get a search warrant. If the cops have good reason to peer inside a house, they can always go to a judge and get permission—just as they do today with a wiretap. The second is to wait for the technology to become ubiquitous. If everybody owns a through-the-wall imager, the court suggested last week, then nobody can reasonably expect any privacy anywhere, even at home. ■

Still Not out of the Woods

Antibiotics don't cure chronic Lyme disease, new studies show, but one dose may prevent infection

MOST PEOPLE WHO DEVELOP LYME disease, a tick-borne infection that's endemic in parts of the Northeast and Midwest, are easily cured by taking an antibiotic like doxycycline for a couple of weeks. But for years a debate has raged over what to do about patients whose symptoms (fatigue, mental confusion, joint pain) never seem to clear up. One small but vocal group of doctors and patient advocates believes that Lyme's corkscrew-shaped spirochetes have burrowed deep into their victims' bodies and can be eradicated only with intensive antibiotic treatment over many months. Another group believes, just as adamantly, that the bacteria are long gone, making further treatment with powerful antibiotics—which can lead to potentially fatal infections or blood clots—positively dangerous.

Now comes word of two studies in the *New England Journal of Medicine* that show that long-term antibiotic treatment is no better than a placebo for folks with chronic Lyme disease. Originally scheduled for publication in July, the research is part of a group of findings made public last week—just in time for the peak Lyme months of June and July. If confirmed by another major study that's looking at chronic Lyme and antibiotics from a slightly different perspective, the results would seem to settle the question once and for all.

Researchers from Boston, New Haven, Conn., and Valhalla, N.Y., followed 129 pa-

TINY CULPRIT: Though magnified here, deer ticks are easy to miss

tients who had previously been treated for well-documented cases of Lyme disease. Sixty-four were given antibiotics directly into their veins for a month, followed by two months of oral antibiotics. The others received dummy medications. A third of the chronic Lyme patients got better while taking the antibiotics, but so did a third of those on the placebo. Indeed, the results were so similar that a monitoring board decided to cut the trials short rather than add more subjects to the test groups.

Unfortunately, the debate over chronic Lyme has become so heated that no one expects the controversy to go away. But both sides may take comfort in the other findings that were released by the *New England Journal* last week. After studying 482 subjects bitten by deer ticks in a part of New York with a lot of Lyme disease, researchers concluded that a single 200-mg dose of doxycycline dramatically cut the risk of contracting the disease. That good news is tempered somewhat by the fact that 80% of patients who develop the infection don't remember ever being bitten by a tick. (The bugs inject an anesthetic into the skin to mask the pain and in their nymph stage are so small—about the size of a poppy seed—that they are easily overlooked.)

There's still plenty you can do to protect yourself in a Lyme-infested neighborhood: tuck your pants in your socks, spray DEET on your clothing, check yourself and your kids for ticks. And if you develop a spreading red rash—particularly if it's accompanied by joint pain, chills or confusion—make sure you see a doctor right away. The trick, as always, is to be vigilant without overreacting.

—By Christine Gorman

