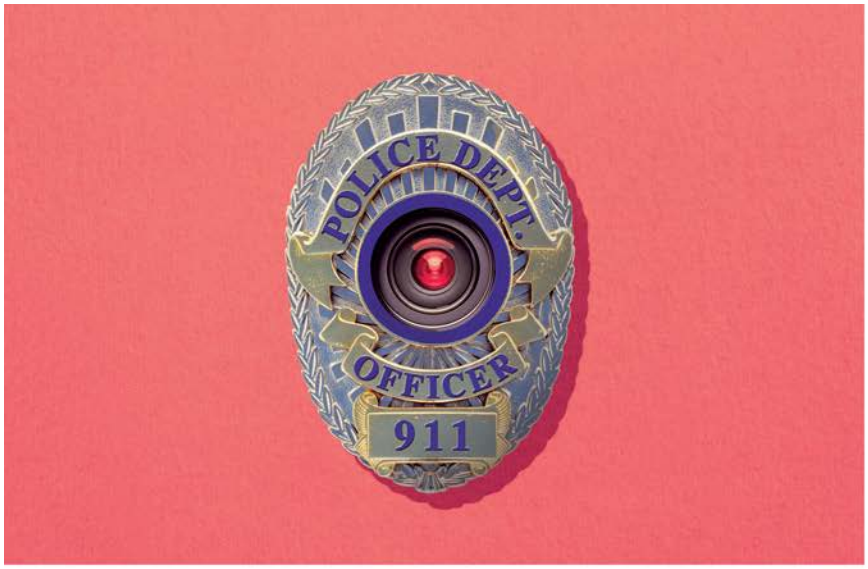


Shifts: Technology

THE FUTURE OF GETTING ARRESTED

What they're gonna do when they come for you

BY LEON NEYFAKH

Even the most straightforward arrest is built upon an incredibly complex foundation: the moment the handcuffs go on is the moment some of our society's most hotly contested ideas about justice, security, and liberty are brought to bear on an individual. It's also a moment that's poised to change dramatically, as law-enforcement agencies around the country adopt new technology—from predictive-policing software to surveillance cameras programmed to detect criminal activity—and incorporate emerging research into the work of apprehending suspects.

Not all of the innovations that are in the works will necessarily become widely used, of course. Experts say that many of them will ultimately require trade-offs that the public may not be willing to make. "We're approaching a world where it's becoming technologically possible to ensure 100 percent compliance with a lot of laws," says Jay Stanley, a senior policy analyst at the American Civil Liberties Union. "For example, we could now pretty easily, if we wanted to, enforce 100 percent compliance with speed limits." That doesn't mean we will.

Here, drawn from interviews with a range of thinkers and practitioners, is a glimpse of how tomorrow's police officers may go about identifying, pursuing, and arresting their targets.

1 How They'll Know a Crime Is Taking Place

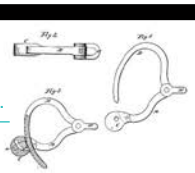
Devices designed to detect questionable activity are proliferating. Several cities have recently put in place networks of microphone-based gunshot sensors, and others are likely to adopt similar systems. When a sensor picks up a suspicious noise, a computer program analyzes the sound and, if it resembles gunfire, determines its point of origin to within a few yards. A human reviews the report and, if warranted, dispatches officers to the scene—all within about 40 seconds of the gunshot. Meanwhile, a Vancouver company is testing marijuana breathalyzers that can approximate the amount of THC in a person's system; Guohua Li, an epidemiologist at Columbia University, thinks they will probably be in routine use within five years. Police may also start making use of intelligent surveillance cameras equipped with sensors that can identify abnormal or suspicious behavior. According to Jennifer Lynch of the Electronic Frontier Foundation, such technology is being tested in several American cities and is already sophisticated enough to "notice" when someone leaves a bag unattended, or when a car repeatedly circles the same block.

At the federal level, an initiative called Next Generation 911 will enable victims and witnesses to send texts and, eventually, photos and videos to emergency dispatchers—something that's currently impossible because the 911 network runs on analog technology from the 1970s. People caught in situations—home invasions, for instance, or domestic-violence incidents—in which they can't safely speak into a phone will be able to get help, and police will receive valuable real-time crime-scene footage.

Controversially, police departments are starting to monitor social media, which many gangs have embraced as a vehicle for branding and boasting. By searching for specific keywords and mapping interactions among individual users, law-enforcement agencies can keep track of suspected gang members, and identify bubbling gang rivalries.

A BRIEF HISTORY OF ARRESTS

1862: The first adjustable handcuffs are patented.



1888: A French official pioneers the modern mug shot.

1924: Congress authorizes the FBI to launch a national clearinghouse and repository for fingerprints.

History 1875 1900 1925

ILLUSTRATION BY ÁLVARO DOMÍNGUEZ

They can also infiltrate networks by posting under aliases and "friending" suspects. The Yale criminologist Andrew Papachristos, who works closely with police departments and gangs, says he hopes that the coming years will see a public debate about how aggressively law-enforcement agencies should use the Web to gather intelligence on people who are not already criminal suspects. Many states have set legal thresholds for classifying someone as a gang member, Papachristos says. "But if all the evidence you need is a Twitter post that says, 'I hate the Disciples,' the bar is changing."

2 How They'll Find Their Suspects

Usually *predictive policing* refers to feeding reams of city data into a computer and dispatching extra officers to areas that are deemed to be at high risk of future crime. There's potential, though, for predictive policing to be less passive. See, for instance, the approach taken in Albuquerque, where, according to a report from the Police Executive Research Forum, officers took the established (if controversial) practice of leaving "bait" for would-be thieves to the next level: they planted iPads, cars, and spools of copper wire in areas that were flagged by their predictive software, and then arrested people who tried to steal them.

Departments that would rather not rely on probabilities might try the newfangled "send an airplane with cameras into the sky and have it record every single thing that happens below" technique. According to the Center for Investigative Reporting, that's more or less what police in Compton, California, have been doing. Kannappan Palaniappan, a computer-science professor at the University of Missouri, says this could one day become a standard method for monitoring high-crime urban neighborhoods. With the use of wide-area surveillance, police would be able to "go to the tape" when, say, a drive-by shooting occurred, and track the assailants' movements.

Wide-area surveillance is not coming to your town tomorrow, however. For starters, huge leaps in data-storage technology must occur before police can feasibly keep a 24/7 video record of an entire city, according to Palaniappan. What the ACLU's Jay Stanley calls "societal self-restraint" will likely play a role as well. Last year, he pointed out, the city council in Dayton, Ohio, voted down the local police department's proposal to use wide-area surveillance, because of privacy concerns. "There's a lag between when people start to lose their privacy and when they really start to feel it," Stanley said. "At a certain point, the frog might just say, 'It's getting too hot in here,' and it'll jump out."

3 How They'll Actually Arrest Someone

Confronting suspects and taking them into custody should become safer for police officers, thanks to so-called real-time crime centers staffed by analysts who can transmit information to officers en route to a crime scene—the criminal histories of the people who live at that address, say, or floor-plan details, or intelligence gathered from surveillance cameras.

An even more profound change involves the personal information that will be collected immediately following an arrest. Tablets equipped with facial-recognition software have already been rolled out in San Diego; meanwhile, the FBI has launched a giant database of biometric information that includes images of people's faces, irises, fingerprints, and palms, as well as details about tattoos, scars, and other markings. Civil-liberties groups worry that as police make use of new identification tools during routine stops—and in the process collect new kinds of biometric data, including DNA and voice samples—the FBI's database will swell with intimate information about people who are never convicted of any crime.

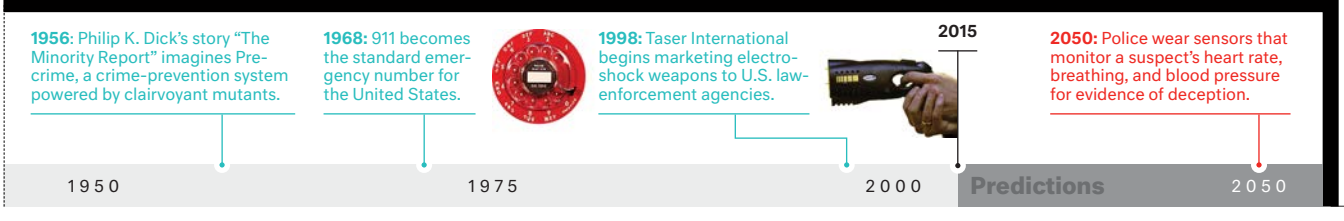
Of course, technology can only do so much to alter the way police officers perform their jobs; the rest is up to them and their superiors. On that count, happily, some experts predict significant improvement in the way officers treat suspects once they've arrested them. For one thing, the process will become more transparent, thanks to the spread of body-mounted cameras that capture officers' interactions with the public.

According to the Boise State University psychology professor Charles Honts, interrogations could also become less coercive as agencies across the country decide to abandon their traditional interrogation method, known as the Reid Technique. Newer approaches discourage officers from lying to suspects about evidence or attempting to manipulate them through implicit threats and promises. Instead of, say, looking for signs of deception in suspects' nonverbal behavior, interviewers are encouraged to create situations that give suspects an opportunity to contradict evidence investigators have already confirmed.

Experimental research by Saul Kassin, a psychologist at the John Jay College of Criminal Justice, has shown that, compared with these newer methods, older methods that rely on deceiving the suspect increase the risk that innocent people will confess. Honts hopes that with time, police departments will respond to the emerging evidence. "There's no uniform code about how things are supposed to be done by the police, so it'll take a while," he told me. "But the force of data is going to make it happen."

Leon Neyfakh reports on ideas for The Boston Globe.

Introducing Shifts: This is the first in a print and online series on the elements of a changing world, from technology and business to politics and culture. For more information, visit **theatlantic.com/shifts**.



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