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NEWS ANALYSIS

That's No Phone. That's My Tracker.

By PETER MAASS and MEGHA RAJAGOPALAN

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THE device in your purse or jeans that you think is a cellphone — guess again. It is a tracking device that happens to make calls. Let's stop calling them phones. They are trackers.



Javier Jaén Benavides

Most doubts about the principal function of these devices were erased when [it was recently disclosed](#) that cellphone carriers responded 1.3 million times last year to law enforcement requests for call data. That's not even a complete count, because T-Mobile, one of the largest carriers, refused to reveal its numbers. It appears that millions of cellphone users have been swept up in government surveillance of their calls and where they made them from. Many police agencies [don't obtain search warrants](#) when requesting location data from carriers.

Thanks to the explosion of GPS technology and smartphone apps, these devices are also taking note of what we buy, where and when we buy it, how much money we have in the bank, whom we text and e-mail, what Web sites we visit, how and where we travel, what

time we go to sleep and wake up — and more. Much of that data is shared with companies that use it to offer us services they think we want.

We have all heard about the wonders of frictionless sharing, whereby social networks automatically let our friends know what we are reading or listening to, but what we hear less about is frictionless surveillance. Though we invite some tracking — think of our mapping requests as we try to find a restaurant in a strange part of town — much of it is done without our awareness.

“Every year, private companies spend millions of dollars developing new services that track, store and share the words, movements and even the thoughts of their customers,” writes [Paul Ohm](#), a law professor at the University of Colorado. “These invasive services have proved irresistible to consumers, and millions now own sophisticated tracking devices (smartphones) studded with sensors and always connected to the Internet.”

Mr. Ohm labels them tracking devices. So does Jacob Appelbaum, a developer and spokesman for the [Tor project](#), which allows users to browse the Web anonymously. Scholars have called them minicomputers and robots. Everyone is struggling to find the right tag, because “cellphone” and “smartphone” are inadequate. This is not a semantic game. Names matter, quite a bit. In politics and advertising, framing is regarded as essential because what you call something influences what you think

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about it. That's why there are battles over the tags "Obamacare" and "death panels."

In just the past few years, cellphone companies have honed their geographic technology, which has become almost pinpoint. The surveillance and privacy implications are quite simple. If someone knows exactly where you are, they probably know what you are doing. Cellular systems constantly check and record the location of all phones on their networks — and this data is particularly treasured by police departments and online advertisers. Cell companies typically retain your geographic information for a year or longer, [according to data](#) gathered by the Justice Department.

What's the harm? The United States Court of Appeals for the District of Columbia Circuit, [ruling about the use of tracking devices](#) by the police, noted that GPS data can reveal whether a person "is a weekly church goer, a heavy drinker, a regular at the gym, an unfaithful husband, an outpatient receiving medical treatment, an associate of particular individuals or political groups — and not just one such fact about a person, but all such facts." Even the most gregarious of sharers might not reveal all that on Facebook.

There is an even more fascinating and diabolical element to what can be done with location information. [New research](#) suggests that by cross-referencing your geographical data with that of your friends, it's possible to predict your future whereabouts with a much higher degree of accuracy.

This is what's known as predictive modeling, and it requires nothing more than your cellphone data.

If we are naïve to think of them as phones, what should we call them? [Eben Moglen](#), a law professor at Columbia University, argues that they are robots for which we — the proud owners — are merely the hands and feet. "They see everything, they're aware of our position, our relationship to other human beings and other robots, they mediate an information stream around us," he has said. Over time, we've used these devices less for their original purpose. A [recent survey](#) by [O2](#), a British cell carrier, showed that making calls is the fifth-most-popular activity for smartphones; more popular uses are Web browsing, checking social networks, playing games and listening to music. Smartphones are taking over the functions that laptops, cameras, credit cards and watches once performed for us.

If you want to avoid some surveillance, the best option is to use cash for prepaid cellphones that do not require identification. The phones transmit location information to the cell carrier and keep track of the numbers you call, but they are not connected to you by name. Destroy the phone or just drop it into a trash bin, and its data cannot be tied to you. These cellphones, known as burners, are the threads that connect privacy activists, Burmese dissidents and coke dealers.

Prepays are a hassle, though. What can the rest of us do? Leaving your smartphone at home will help, but then what's the point of having it? Turning it off when you're not using it will also help, because it will cease pinging your location to the cell company, but are you really going to do that? Shutting it down does not even guarantee it's off — malware can keep it on without your realizing it. The only way to be sure is to take out the battery. Guess what? If you have an [iPhone](#), you will need a tiny screwdriver to remove the back cover. Doing that will void your warranty.

[Matt Blaze](#), a professor of computer and information science at the University of Pennsylvania, has written extensively about these issues and believes we are confronted with two choices: "Don't have a cellphone or just accept that you're living in the [Panopticon](#)."

There is another option. People could call them trackers. It's a neutral term, because it covers positive activities — monitoring appointments, bank balances, friends — and problematic ones, like the government and advertisers watching us.

We can love or hate these devices — or love *and* hate them — but it would make sense to call them what they are so we can fully understand what they do.

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