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## **Is Personal Privacy Going the Way of the Buggy Whip?**

**Jeffrey R. Harrow**  
**Principal Technologist, The Harrow Group**

In an [earlier essay](#) I touched on the continuing erosions of personal privacy. These erosions are not simply the result of governmental database intrusion (although that certainly bears watching), but they're also occurring due to technological innovations that could, conceivably, lead to a time when everybody is watching and recording everyone else. Now that seven months have passed since that previous article on personal privacy, it's time for an update.

Surveillance technologies already seem to be an accepted norm, although currently they're principally used by businesses and by governments who place cameras and sensors in stores and on public ways. Whether we're driving along an expressway or motorway, passing through a toll booth, driving or walking downtown, being stopped by a police car, or shopping in a retail store, we're very likely "on-camera," and on-tape.

But this is generally a one-way street (the occasional Rodney King incidents excepted). The commercial and governmental monitors have the advantage on us. For example, if someone shoplifts, they (appropriately) run a high risk of being caught, with the tape going to the prosecutor. And I expect that a "jury of our peers" would be hard-pressed to ignore a TV show of the theft, staring the perpetrator.

### **Turning The Tables.**

But suppose someone steals something from *us*—which might likely happen beyond the gaze of today's surveillance cameras -- it's often "our word against theirs." Consider if a Rodney King type incident were to happen to us "behind" a squad car's camera. Or, in one personal case on the Champs-Élysées, consider that my wife wasn't even aware that she had been professionally pickpocketed until well after the fact. We don't have the advantage of a record of what actually happened (or, generally, even have access to the images from a nearby surveillance camera that might have recorded the event.).

That's the state of things -- so far. Because as technology continues to evolve, tech companies, including the 500 pound gorilla, are starting the process that may turn each of us (who are willing) into elements of a wide-reaching surveillance mesh.

### **Enter The Hardware.**

One early prototype of the hardware that might enable keeping a personal record of our day comes from a research project within Microsoft, called the "SenseCam." As described and shown in the June 15, 2004 [BBC News](#), this is a specialized camera (which would get far smaller before it might be commercialized) that uses a 132-degree fish eye lens to capture a large swath of the world in front of us.

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Currently, the prototype stores 2,000 images which are triggered by its built-in accelerometers, passive infrared detectors, and sensors for environmental conditions such as light level and temperature (and later, I'm sure, GPS information and the "direction of gaze" from an electronic compass). And, reminiscent of the "enhanced" Six-Million Dollar Man, this camera can record into the infrared range, providing more information on playback than our on-site eyes could glean.

As the camera fills up, its contents would be transferred to a PC where, through a special application, the data and pictures could be searched and presented in any number of ways, such as in a timeline or as a "fly-through."

### **The Power Of The Network.**

Of course my SenseCam might not have recorded my wife's pocket being picked; I might have been looking the wrong way to "see" the pickpocket. But imagine if a non-trivial number of people began wearing such devices. Then, assume that these folks were willing to automatically add the time, date, location, and "direction of gaze" of each of their images (but not the images themselves) to a public database. Even if *my* SenseCam did not capture the crime on the Champs-Élysées, I might have been able to check the database for others who have recorded the scene, and then sent them a digital call for help. A "coalition of the willing" might then choose to send me their specific pictures of the pick pocketing event, which might help the police identify the "perps." And that's just one example.

The primary intent of this prototype is not for surveillance. In the words of researcher Lyndsay Williams, it's "*like a black box for the human body,*" referring to the "black boxes" (which are actually orange) in commercial aircraft that record the "life" of a flight, including aircraft data that can be used to reconstruct events leading up to a crash.

For humans though, our "black boxes" would record *our lives*, which could be helpful to a diverse set of people in many ways. Consider that in the case of an aging population, or for people with specific memory or cognitive diseases, these records might help them maintain a "visual diary" that they could peruse to refresh their memories. (And a killer mainstream software application might be to help all of us remember names and faces!) Similarly, if audio were also recorded and the software was smart enough to categorize and summarize the images, sounds, and environmental data. The practice of taking notes at meetings might become an ancient custom.

Also, tourism could be enhanced with a detailed "home movie" record of vacations, etc. I can imagine that professional tour guides or travel agencies might make their records of trips available to prospective clients to entice them to take the trip. And more...

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### **Always With Two Faces.**

As with most of what technology brings us, there is also a dark side. With the likelihood that other than in our homes (NannyCams could even remove this exception), someone, somewhere might well have a record of our locations and actions and associates. (I can imagine any number of scenarios where this could be, shall we say, uncomfortable). Furthermore, if people chose to store their records online, then a hacker or agency might be able to stitch together a comprehensive view of our days.

There's also the issue that historically, the courts have defined numerous guidelines as to where people have (and don't have) the reasonable expectation of privacy. Yet if the population takes to SenseCam-like devices in a big way, the current legal presumptions of privacy might have little meaning.

### **Think...**

Surveillance of this depth is not going to happen in the near future. On the other hand, cell phone cameras which can record images and sound are making significant inroads into pockets—which is a telling first step.

Technology is going to continue to march forward, and it will yield and refine many new devices that will intentionally, or as a byproduct of their intended uses, further erode our privacy. This places us at a junction where we, as a society, should be deciding just how much we value our privacy. If the concept of personal privacy is no longer significant in the context of our changing world, then these technological developments may be cherished. On the other hand, if we continue to treasure our privacy, we may wish to strengthen controls on who can record what, where, and when.

This issue is far from black and white. There are legitimate desires and concerns on both sides of the privacy fence. But in societies where individuals' rights and freedoms are held in high esteem, it's a debate that's worth having. And we have to have the debate early, or else the inevitable creep of technology will invisibly make the choices for us.

We will, after all, have to live in the world that we create (or allow to be created for us). Let's be sure that it's the world that we collectively want.

*This essay is original and was specifically prepared for publication at Future Brief. A brief biography of Jeff Harrow can be found at our main [Commentary](#) page. Other essays written by Jeff Harrow can be found at his [web site](#). Jeff receives e-mail at [jeff@theharrowgroup.com](mailto:jeff@theharrowgroup.com). Other websites are welcome to link to this essay, with proper credit given to Future Brief and Mr. Harrow. This page will remain posted on the Internet indefinitely at this web address to provide a stable page for those linking to it.*