

# Why the awareness of CCTV surveillance must grow

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## Abstract

With the increase of technology use across the globe, closed-circuit television (CCTV) surveillance is also becoming increasingly widespread. This trend should, however, not be taken lightly. There are certain claimed benefits to CCTV. For example, it is said to reduce crime, prevent terrorism and increase marketing profits. But many of the beneficial claims have been partly or entirely disproven or come with significant side effects. The drawbacks and dangers of widespread CCTV are, on the other side, backed up by scientific studies. Most of the hazards may not lie in the use of CCTV itself but in how the humans behind the cameras deal with it. Discrimination, invasion of privacy, totalitarian monitoring, data leaks, fraud, and perceived impaired freedom of expression are all worrisome side effects of the increase of CCTV surveillance. To cope with CCTV ethically and safely, people must gain more awareness about the current state of affairs and possible future scenarios regarding CCTV use.

*Keywords:* CCTV; surveillance; Big Brother.

## 1 Introduction

Technology is playing an increasingly widespread role in all parts of society. People apply technology to make our lives more efficient, more productive, more connected, just better. But this widespread use of new technologies can come at unforeseen prices for society and the individual. One of these double-edged swords is closed-circuit television (CCTV) surveillance. If it's run well, it can be a useful tool for society. However, if it falls into the wrong hands, it can be a great weapon against our rights and freedoms. People should not sleepwalk into a surveillance society. The individual should know exactly how many cameras are watching the streets, and therefore them. "Bigger Brother" is a project that aims to spread awareness among people regarding CCTV, while at the same time giving an ironic wink to the pop classic "Big Brother". Bigger Brother is a crowd-sourcing platform intending to localize all the CCTV warning signs we can collectively find. Hopefully, making people an active part in uncovering the CCTV spread will increase their awareness, starting in the Netherlands. The Netherlands is extending its CCTV surveillance, and this is going to do more harm than good for the citizens of the country. So, this increase in awareness is necessary.

## 2 Methodology

One common argument favoring more CCTV surveillance is that it should help fight crime. But is the crime rate so bad in the Netherlands? According to Dutch news, there are only

0.64 murders per 100 000 people in the Netherlands, making the Dutch murder rate one of the lowest in Europe. And, although tourists are targeted by thieves, the rate of violent crime is low (AIT News Desk, 2019). On top of that, approximately 1 million surveillance cameras were reported in the Netherlands in 2019, meaning 5.8 cameras per 100 individuals (AIT News Desk, 2019), an extremely high density of surveillance. Therefore, probably adding even more cameras will not necessarily help the already low crime rate go down even more. And that would be assuming that CCTV actually helps reduce crime effectively.

Scientific evidence suggests CCTV is actually not effective in reducing overall crime rates because it tends to relocate it (Jung & Wheeler, 2019). Additionally, CCTV surveillance may only be effective in preventing a small and specific portion of crimes. CCTV does have some advantages in crime-fighting. CCTV may help the police to find thieves by examining video footage after a crime was committed and even to detect ongoing crimes by real-time monitoring. Research suggests CCTV is effective in specific forms of offenses and at specific locations. A study by Welsh and Farrington in 2004 reported that cameras effectively decrease crimes in parking lots or residential areas. It reduced crime by 21 percent in car parks when combined with proper street lighting (Welsh & Farrington, 2004). However, there seems to be no CCTV-related decrease in crowded places like city centers or public transport (Gerell, 2021). The two types of crimes that surveillance is shown to be effective against are property crime and narcotics but CCTV is not identified as effective at decreasing violence (Gerell, 2021). Thus, CCTV doesn't have a general crime-reducing effect. It is only effective under certain conditions. Crime will still take place with or without the cameras.

There is also another alarming aspect to using CCTV surveillance against crime. The people behind the cameras can be biased and discriminating in the process of detecting crime. Victims of lower-income classes or ethnic minorities tend to be treated with less consideration or not helped at all, as shown by studies in America (Mallicoat, 2018). Crimes that take place in these less affluent neighborhoods are not given as much importance by the defense institutions (Singer, 2017). Furthermore, there tends to be discrimination against the people being seen in the camera footage. People of lower social status or ethnic minorities tend to be more heavily watched, and the people behind the cameras tend to be more mistrusting towards them. According to Norris (1997), the social bias of CCTV surveillance systems is created by the existing prejudices of the people operating these systems. In Norris' sociological study conducted in the USA, black people were two and a half times more likely to be surveilled in any conjuncture. These kinds of societal biases will make people belonging to the minorities more aware that they are being surveilled when going out on the streets. And their caution is warranted, as these biases can result in the arrest of innocent people (Schoon, 2001). But the CCTV doesn't only affect these groups.

Jacob Sullum, a syndicated columnist for the American Civil Liberties Union (ACLU) pointed out that when individuals know they are being watched, they exhibit some specific

behaviors. They might try their best not to call attention to themselves. For example, they learn to be careful which books they read in public or of the way they dress to not look like terrorists or gang members (ACLU, 2002). This is worrisome as it can lead to less diversity and perceived freedom of expression for everyone. But this kind of mass surveillance is not only a threat to individuals' freedom of expression. In the wrong hands, it might result in a violation of fundamental human rights.

The widespread use of the CCTV framework affects individual freedom and privacy. Something that starts as an attempt towards more efficient administration, more tailored marketing, and more effective crime-fighting might become a totalitarian tool for controlling and monitoring people. Many people fear totalitarian monitoring systems like the Social Credit System in China but at the same time deny the possibility of the implementation of such a system in their own country. The Social Credit System in China is designed to improve law enforcement and motivate people to adhere to a moral code, two things China had found difficulty with (Creemers, 2018). The government monitors all individuals, and their actions are being credited as socially beneficial, which would lead to rewards, or disadvantageous, which would result in penalties (Creemers, 2018). These consequences can impact different fields of life, for example, an induced travel ban or tax reduction (Creemers, 2018). To track everyone, the facial recognition system in China is so advanced that it can scan the faces of 1.4 billion citizens in just a second (Lentino, 2019). The way CCTV surveillance can aid totalitarian governments in enforcing their laws better is concerning because the laws of totalitarian governments are a direct violation of European constitutional rights and an invasion of individuals' privacy. Having such a surveillance system in place can go against everything European countries like the Netherlands stand for when there is an unforeseen shift in the government. Nevertheless, the framework for exactly this kind of use is also being laid out in European countries like the Netherlands.

However, not only totalitarian monitoring systems create concerns for privacy and freedom. In August 2019, the personal information of over 1 million people was found on a publicly accessible database, including biometric information like facial recognition information and fingerprints. Such data breaches can put victims at a considerable disadvantage in their careers and personal lives by making sensitive information public that can induce discrimination. It can even be dangerous for the individual when they become the victim of fraud or framing. Especially permanent unchangeable information like biometrics is hazardous in this respect. Citizens' privacy may be violated if facial recognition-powered surveillance systems are improperly deployed or secured (Zeng, et al., 2019). The more people store data from CCTV cameras and other sensors, the more data there will be for hackers to take advantage of.

Apart from the mentioned social, legal, and ethical issues with CCTV surveillance, there is also a logistical one. Cameras may not have enough benefits to justify their cost, as running a surveillance system requires significant amounts of money and resources for equipment installation, personnel training, and system maintenance (Jung & Wheeler, 2019). Piza, Gilchrist, and others (2016) argued that a proactive surveillance system can be

cost-effective only for agencies with pre-existing CCTV.

Knowing all these drawbacks, it is interesting to note that studies found that public attitudes are usually positive towards CCTV installations, mostly because people believe CCTV can prevent crime (Wells, et al., 2006). However, as mentioned above, it only works for specific forms of crime or relocates the crime. And, although people had high positive expectations of surveillance camera installation, Gill and colleagues (2007) reported in their study that most residents become indifferent to the existence of CCTV cameras after they are installed on the streets.

In his speech, former UK Surveillance Camera Commissioner, Tony Porter, stated in 2015 that CCTV is a valuable tool in preventing and deterring crime, keeping the public safe, and helping the fight against terrorism across the country. One of these valuable tools is the Terrorist Surveillance Program. It was adopted to keep society safe from terrorist attacks and prevent events similar to the 9/11 terrorist attack. The Liberties Oversight Board, an oversight body created to examine how the war on terror policies impacted civil liberties, conducted a study regarding this program. They concluded, however, that there was “no instance in which the program directly contributed to the discovery of a previously unknown terrorist plot or the disruption of a terrorist attack” (Laperruque, 2021), thus refuting one of Porter’s main statements on the benefits of CCTV. It seems that people’s opinion of CCTV is better than the evidence warrants.

Yet, there is one area of society that does benefit greatly from all this surveillance. There are worldwide economic benefits to CCTV. In some markets, retailers pay avant-garde billboards companies to target customers individually by facial recognition. Cameras determine an individual’s age, gender, and mood to show advertisements tailored to the potential customer’s estimated needs. The vice president of Cognitec Asia Pacific, the company that develops “market-leading face recognition technologies for customers and government agencies around the world”, states that using facial detection commercially can be compared to Facebook’s manipulation of users’ search history (Gillespie, 2019). Although these practices might reap higher profits margins, they come with certain specific risks besides the ones already mentioned above. One of these is the creation of echo chambers and the implementation of systematic discrimination based on gender, age, and other appearance-related qualities. The companies might base their tailored advertisements on past purchases made by customers, but trends may change. If certain people only see certain advertisements, this might create a self-fulfilling prophecy. The people that get the advertisements are increasingly more likely to buy the items advertised, thus reinforcing the prediction of similar advertisements. This might result in people of a certain age, gender, or ethnic minority never seeing advertisements of certain products, even though they would be interested in them. Besides, the invasion of the privacy of people passing by the billboards through involuntary, personalized advertisements is not desirable either.

### 3 Discussion and Conclusions

Even though CCTV appears to bring many benefits to society and its government, some of these supposed beneficial claims have been disproven by research. Studies have demonstrated that surveillance systems have no power in eradicating crimes in general. They tend to intimidate criminals and make them move their criminal activities to neighborhoods that don't have these systems. Furthermore, video surveillance in public is a threat to privacy and freedom in both actions and self-expression. Widespread CCTV systems can also form a real danger to fundamental human rights if the system falls into the hands of a totalitarian regime. But, even in the hands of democratic people, CCTV accommodates discrimination and the arrest of innocent individuals. Furthermore, the large databases storing the sensitive data of the people being monitored can be hacked, thus endangering the privacy of the individuals. Even though the literal and figurative costs of these CCTV systems seem to outweigh the benefits, the public opinion towards CCTV stays alarmingly positive. And, marketing companies gladly use these technologies that increase their profits, not minding their harmful effects on society. There are many dangers in widespread CCTV, and people must become aware of them in time to collectively use the technologies more wisely and prevent future atrocities from happening.

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