BEING SEEN, BEING GOOD: HOW OBSERVATION INFLUENCES DRIVING HABITS

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This article discusses how supervision and observation encourage altruism and prosocial behavior. It focuses on several types of observation: surveillance, sousveillance, peer-to-peer surveillance, and self-surveillance. These aspects are analyzed in greater detail in a case study of various approaches to encouraging eco-driving.

Keywords: altruism, surveillance, observation, driving habits

Avtor v prispevku ugotavlja, kako nadzorovanje in opazovanje spodbujata altruizem in prosocialno vedenje. Posveti se različnim oblikam opazovanja, in sicer nadzoru od »zgoraj« in »spodaj«, vrstniškemu nadzoru in samonadzoru. Te vidike bolj podrobno obravnava na primeru različnih načinov za spodbujanje eko-vožnje.

Ključne besede: altruizem, nadzor, opazovanje, vozniške navade

INTRODUCTION

This paper examines the all-seeing gaze and the influence it has on people's habits. More specifically, it analyzes driving a car as an example that illustrates how one's everyday habits and practices change under different types of gazes. The gaze is not necessarily directed "from above" (i.e., from a symbolic position of control and power), but can also reach the subject "from below" (i.e., from an underprivileged or a subordinate position) or "from the side," which happens when one is observed by friends, acquaintances, and peers that are more or less equal. It is also possible to monitor one's own actions through self-surveillance, by turning the gaze inwards, and in doing so influence one's own behavior and habits.

This article describes the angles of view from which people can be observed and monitored. I begin with the classic Bentham surveillance "from above." Then I present three less obvious types of monitoring and tracking: mutual peer-to-peer surveillance, lateral surveillance, and self-surveillance. I use the example of driving to ascertain which type of surveillance is the most effective in changing driving habits and in encouraging safe, economical, and environmentally and socially responsible driving.[1]

TYPES OF SURVEILLANCE

It is not possible to discuss surveillance without mentioning Jeremy Bentham, the English jurist and philosopher, who, in the late eighteenth century, had a remarkable idea on how to improve total institutions. Up until then, prisons mainly served as dungeons that kept prisoners out of sight, whereas Bentham's prison would be easy to oversee and its inmates would be visible. He

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described a conceptual design for the Panopticon, a circular structure with a watchtower at its center, from where a watchman could monitor the inmates in their cells (see Bentham 1995). This building design reflects its central purpose: to induce a sense of permanent visibility, which, according to Michel Foucault (1977), establishes and maintains the automatic functioning of power. The trick is that one no longer needs an actual supervisor due to the (supposed) omnipresent gaze that keeps track of what goes on in the cells. The very sense of being visible can make the people in the cells change their behavior and their habits.

Foucault says that this type of surveillance transfers "the power to enforce" to the other side (i.e., to the person that is being surveilled) and that people subjected to a field of visibility inscribe in themselves that power relation and become the principle of their own submission.

In the modern world, the panoptic principle of permanent visibility has come to be taken for granted—even outside of total institutions. Of course, people are no longer followed only by the gaze of the supervisors, directed "from above." Kevin D. Haggerty and Richard V. Ericson (2000) explain that the world has moved from a period of clearly defined surveillance systems (or "discrete" systems, as they put it, in the sense of clear demarcation, identifiability, and separation) to a period of surveillant assemblages that include intertwined forms of surveillance that are not clearly defined. The panoptic metaphor thus carries a different meaning in modern society. Some describe it as a "super-panopticon." Others mostly refer to an "electronic panopticon" (Haggerty and Ericson 2000: 607) due to the recent prevalence of digital surveillance. It is becoming increasingly more common for an individual to be under surveillance at every step, while performing almost any activity: paying with a credit card, using a mobile phone, searching the internet for information, driving a car, and so on (cf. Završnik 2010).

If almost every activity is monitored—even if someone volunteers to be monitored—it is difficult for that individual to ever be unnoticed or invisible. The "disappearance of disappearance" is thus one of the main notions in the formation of the surveillant assemblage that is seeping into all pores of society. Thus, individuals that wish to improve the level of their own freedom must trade it for other social rights and benefits (Haggerty and Ericson 2000: 619). Privacy is no longer a self-evident right; it is becoming a marketable commodity and people are increasingly acquiescing to surveillance and allowing their behavior to be monitored, especially if they believe that it is done for their benefit (Humphreys 2011: 577).

People are also increasingly monitoring each other (Andrejevic 2005) and even themselves, as they share their location and upload images and videos from their own lives, recorded mainly with ubiquitous mobile phones, to online social networks. Individuals track and monitor their habits and share that information with others, thereby blurring the lines between private and public lives and spaces. Such forms of self-surveillance, primarily made possible by new information and communication technologies, have a profound impact on behavior and on how people experience privacy.

THE INFLUENCE OF SURVEILLANCE ON BEHAVIOR AND HABITS

Mutual surveillance does not have only negative effects. Numerous studies have shown that the feeling of being watched can be crucial in changing habits and in encouraging behavior that is less selfish and more prosocial (e.g., Bourrat, Baumard, and McKay 2011; Westacott 2010; White 2014). Researchers from Newcastle University in the UK, for example, explored the influence that the feeling of being visible had on bicycle thieves (Nettle, Nott, and Bateson 2012). They installed signs at three locations on the university campus where the highest number of bicycles had gone missing. The signs displayed the text "Cycle thieves, we are watching you" above a picture of a set of eyes (Figure 1). The researchers monitored the number of thefts at these locations for a year and they determined that the number of thefts fell by 62 percent, but that it went up by 65 percent at control locations where no warning signs were installed. Such methods of theft prevention are inexpensive and apparently quite effective because it is not necessary to actually monitor critical locations (e.g., with surveillance cameras or by stationing security guards).

Figure 1: This text and picture of eyes installed above bicycle racks helped reduce bicycle thefts by 62 percent (source: Nettle, Nott and Bateson 2012).

A similar experiment was conducted at the University of California, Los Angeles. The researchers examined how subtle cues that are being watched can influence generosity (Haley and Fessler 2005). The experiment was conducted on computers that participants used to decide how much money they would give to someone else and how much they would keep for themselves. They were isolated in the room where the experiment took place and the researchers explained beforehand that their decisions would remain anonymous. The key to the experiment was hidden in the desktop background of the computer screen. Some participants were seated in front of computers displaying a stylized pair of eyes on the background, whereas the backgrounds that other participants saw displayed only the name of the institute where the experiment took place. In addition, some participants wore special sound-reducing earmuffs that further isolated them from their surroundings, whereas other participants did not. The results of the experiment

showed that earmuffs had no great effect on generosity, but that the gaze displayed on the background had a significant impact; twice as many participants that saw the background with the eyes allocated more money to the other person than did the participants in the control experiment with a neutral background.

Other experiments to do with participants' moral strength and their altruistic or emphatic impetus have also shown that the sense of visibility is extremely important in encouraging cooperation, altruism, prosocial actions, and volunteering. At the center of the majority of such experiments was the feeling that a "moral authority" was keeping watch over the participants; its mere presence alone was enough to influence behavior. The shocking discoveries made by the social psychologist Stanley Milgram (1974) come to mind at this point. In the 1960s, partly influenced by the trial of the Nazi leader Adolf Eichmann, he conducted a series of tests to determine the effect that the presence of an authority figure can have on a person's actions. The people that took part in Milgram's tests gave in to instructions coming from a point of authority and administered potentially lethal electric shocks to other participants in the test. Fortunately, the individuals receiving the shocks were actors, who were merely pretending to be in pain. Milgram also discovered that peer pressure is the most effective way of influencing people and of encouraging moral (and immoral) acts. This means that encouragement from acquaintances, friends, and random people perceived as equals is even more effective than instructions issued by an authority figure.

Tina Rosenberg (2013) also came to the conclusion that positive examples, peer-to-peer surveillance, and imitating are crucial in setting up voluntary actions. She says that people display prosocial behavior because they feel genuine concern for others and because they wish to change and improve the world. Socially responsible behavior also satisfies the basic human need for recognition, which is an important motivational factor. According to Rosenberg, this desire to be respected can be powerful enough to overturn the hierarchy of needs described by Abraham Maslow. He explained that people's most basic needs are physical; for example, the need for nourishment and safety. Sometimes, however, self-actualization, which is usually addressed only after all other needs have already been met, becomes the most important need of all. An interesting example of peer pressure described by Rosenberg is participation in the Serbian informal group Otpor (Resistance), which was formed in the late 1990s under the regime of Slobodan Milošević. Many youths joined the group because they also saw others resisting the regime. Protests became the central focus of the alternative lifestyle of youths, who saw them as an opportunity to display their courage and support political change. "It created protagonists: people who transformed themselves from passive victims to daring heroes. Their goal was to topple a dictator. But it could have been something else—a political goal such as fighting climate change, or saving Darfur, or a philanthropic goal such as organizing people to carry out health campaigns or protect minority rights" (Rosenberg 2013: 509).

AN EXAMPLE OF THE INFLUENCE SURVEILLANCE CAN HAVE ON DRIVING HABITS

The influence that different levels and types of surveillance can have on behavior and habits is also evident when it comes to encouraging driving that is energy-saving, safe, and environmentally responsible (i.e., driving that reduces greenhouse gas emissions to the lowest

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possible level). Drivers not under surveillance are less concerned with how they are driving than they would be if they knew that someone was keeping an eye on them at all times.

I was aware of the effects of such surveillance when I entered the following into my field journal on the impact of telematics solutions on driving:

> I wasn't particularly nervous about getting the telematics device installed. I watched over the technician's shoulder with interest as he took apart the section under the dashboard and installed a device the size of a cigarette box, also known as a black box. The installation took less than twenty minutes. The technician finished and explained that I can now constantly track my vehicle on a computer, a computer tablet, or a mobile phone. I thanked him, sat in the car, and drove off. I gave no mind to the black box that was now watching over my shoulder—I forgot about it by the time I left the parking lot and drove onto the main road. I remembered it was there only the next day, when I drove down a road where I had previously been stopped by police for speeding. I was driving too fast again, when I suddenly realized that a telematics eye was watching me. I immediately reduced my speed and subjugated myself to the unusual, invisible gaze that was, in my mind, stabbing me in the back of the neck. A few minutes later, however, I again forgot about the gaze of technology and once more hit the pedal.

Most interestingly, the top-down gaze can be merely imagined yet still work, exactly as in the case of the Panopticon, in which the supervisor can be fictitious and still influence inmates' behavior. A few weeks later, I found out that the tracking device had stopped working due to a technical defect a few days after it was installed. That means that the device influenced the driver's performance for nearly a month, even though it was switched off!

Different types of surveillance influence drivers in different ways. During a study of drivers of commercial vehicles that were monitored while driving, their fuel consumption fell by 8 percent on average after the devices were installed (Podjed et al. 2013). Fiat's analysis of the eco:Drive solution, in which drivers exchanged their accomplishments within a community called eco:Ville, showed that such peer-to-peer or lateral surveillance can reduce fuel consumption by 6 percent on average. Fuel consumption by the top 10 percent of their most efficient drivers fell by no less than 16 percent. Fuel consumption and driving behavior can also be influenced by self-surveillance, which can be done by using mobile applications that display speed and acceleration, grade driving styles, and calculate (or at least estimate) fuel consumption. These applications can be very simple and still effective. The mobile application "A Glass of Water" by Toyota, for example, shows water splashing over the edge of a glass if the driver accelerates or decelerates too quickly. The more water the driver spills, the lower the grade. By using such simple self-surveillance of their own driving, people can save fuel and, consequently, reduce greenhouse gas emissions by approximately 10 percent (Barkenbus 2010).

In addition to independent forms of surveillance, combinations also exist. I illustrated one possible combination with a three-part surveillance scheme in which drivers can be monitored by a central authority and a community. Drivers can also track their own actions and, should they choose to do so, share that information with the community and the central supervisor (Figure 2).
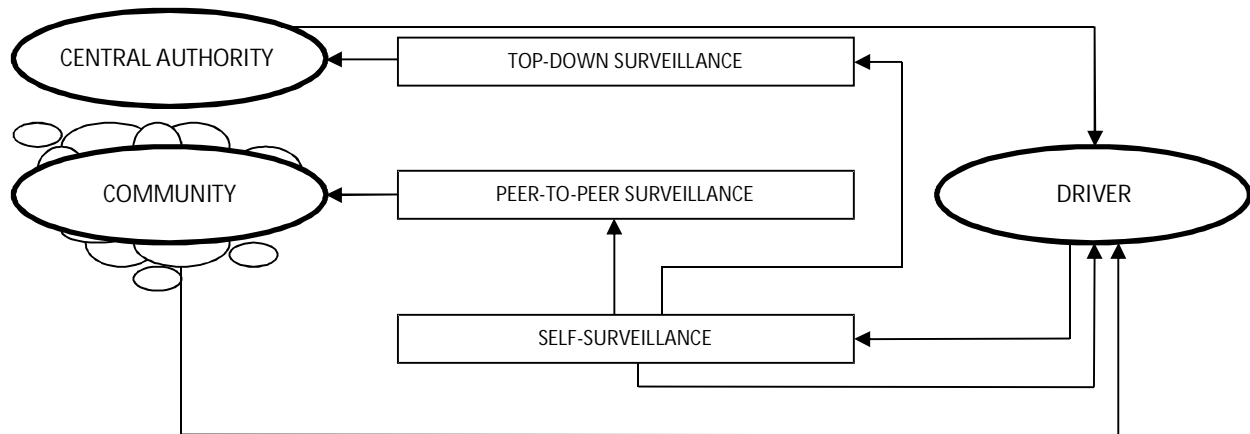
Figure 2: A three-part surveillance scheme for monitoring drivers using telematics solutions (source: Podjed et al. 2013).

Conclusion

It is practically impossible to avoid the gaze and surveillance in the modern world, mainly because of the ubiquitous information and communication technologies that keep track of activity, including driving. The last remaining "islands of privacy" are dissolving (Nippert-Eng 2010). This paper has shown that the effects of such "total surveillance" are not necessarily negative; they can also be prosocial and encourage altruism, volunteering, and social engagement. If people feel like they are being watched, they behave differently and can change their habits in the long term, especially if altruistic and prosocial behavior is rewarded, and selfish and antisocial behavior is penalized.

It is important to consider who sets out the limits of good or bad, positive or negative behaviors. If this is done by the state, surveillance with positive effects can degenerate into its Orwellian opposite, which can already be seen in illiberal pseudo-democratic regimes of some high-tech countries (e.g., Singapore and China), and which is increasingly making its mark in countries that have traditionally been champions of democracy, including the United States and its national and global "all-seeing eye," the National Security Agency. If limits of behavior are set by the individual on the basis of self-surveillance, then those limits can be changed at will; they become indeterminable and unclear. If the limits are defined by the community with the help of mutual or lateral surveillance, which would be a more democratic manner of decision-making, there is again the possibility for the majority to drown out the minority, which is not always the best way to arrive at a consensus and ensure successful coexistence.

I present the three-part cybernetic surveillance scheme as a successful model, with one important addition that prevents the system from becoming a method for managing people and eliminating their constructive participation in shaping the community and in rule-setting. It is essential that individuals be allowed to conduct surveillance within the three-part scheme—not only self-surveillance, but also surveillance of the central authority (e.g., the state, the institution, or the company). Such surveillance "from below," also called "sousveillance" by some authors (Ferenback 2013; Mann and Ferenbok 2013), makes it possible for those that are otherwise subject to surveillance and monitoring to observe. This reduces the "hegemony of gazes" and

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allows people subjugated to gazes and rules to influence decision-makers and change their habits—hopefully for the better.

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BITI VIDEN, BITI DOBER
KAKO OPAZOVANJE VPLIVA NA VOZNIŠKE NAVADE

Prispevek se posveča nadzoru in njegovemu vplivu na naše vedenje in navade. Avtor bolj podrobno obravnava vožnjo z osebnim vozilom, opremljenim s telematskimi rešitvami za sledenje; gre za primer, ki pokaže, kako se vsakdanje navade in prakse preoblikujejo pod različnimi oblikami opazovanja in nadzora, ki ni nujno usmerjen »od zgoraj«, torej s simbolne pozicije moči, temveč se lahko v subjekt pogled zazre »od spodaj«, z deprivilegirane oziroma podrejene pozicije, ali »od strani«, denimo ko nas nadzirajo bolj ali manj enakovredni prijatelji, znanci in vrstniki. Za nameček lahko s samonadzorom oz. pogledom, uprtim vase, tudi sami spremljamo svoja dejanja in posledično spreminjamo lastno vedenje in navade. V članku so torej predstavljeni različni zorni koti, s katerih smo lahko opazovani in nadzorovani, in sicer je to najprej benthamovski nadzor »od zgoraj«, nato pa še tri nekoliko manj očitne oblike spremljanja in sledenja: medsebojni vrstniški nadzor, lateralni nadzor ter samonadzor. Na primeru vožnje avtomobila nato avtor ugotavlja, katera od teh oblik nadzora je najbolj učinkovita pri spreminjanju voznih navad in spodbujanju varne, varčne in okoljsko ter družbeno odgovorne vožnje.

V sodobnem svetu se različnim oblikam nadzora skoraj ni mogoče ogniti; predvsem so tu vseprisotne informacijske in komunikacijske tehnologije, ki spremljajo naše dejavnosti. Učinki tovrstnega »totalnega nadzora« pa niso nujno negativni, temveč so lahko tudi prosocialni in spodbujajo altruizem, prostovoljstvo, družbeno angažiranost. Če imamo občutek, da nas gledajo, se vedemo drugače in lahko tudi dolgoročno spremenimo svoje navade – še posebej če je altruistično in prosocialno vedenje nagrajeno, sebično in antisocialno pa sankcionirano.

Pomembno vprašanje je še, kdo lahko določa meje dobrega in slabega, pozitivnega in negativnega vedenja? Če meje začrta, recimo, država, potem se lahko pozitivni učinki nadzora sprevržejo v njegovo orwellovsko nasprotje. Če meje zariše posameznik (recimo na podlagi samonadzora), potem se lahko te poljubno spreminjajo in postanejo nedoločljive, nejasne. Če meje opredeljuje skupnost s pomočjo medsebojnega oziroma lateralnega nadzora, ki naj bi spodbujala bolj demokratične oblike odločanja, potem obstaja možnost, da večina preglasi manjšino, kar vedno tudi ni najboljša opcija za doseganje konsenza in uspešno sobivanje. Kot možna rešitev se kaže kombiniran model, ki ga avtor predstavi v obliki tridelne kibernetske sheme nadzora; pri tej je pomembno, da preprečuje sistemu pretvorbo v totalitaren način za upravljanje ljudi, hkrati pa jim ne odvzame njihove tvornosti pri oblikovanju skupnosti in določanju pravil.

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