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# Dystopian Realities: Investigating the Perception of and Interaction with Surveillance Practices

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#### **KEYWORDS**

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# Dystopian Realities: Investigating the Perception of and Interaction with Surveillance Practices

#### Abstract

This article seeks to sketch out how the field of surveillance studies has conceptualized surveillance practices, and how cultural and technological shifts have prompted scholars to re-imagine these theoretical frameworks. The article investigates the interplay of (dystopian) popular cultural representations of surveillance cultures and the perception of and attitude towards contemporary surveillance practices, as well as how individuals react to and interact with them. The article also outlines a study regarding the aforementioned issues that was conducted among a sample of 150 university students, which focused especially on each participant's subjective ability to distinguish between fictional scenarios and real-life surveillance practices.

### 1 Big Brother Is Watching You ... Or Is He?

Many of us, upon opening up our laptops to work (or waste time looking at cute cats on the internet), are greeted by the familiar sight of a little piece of tape that we placed on our screens in an effort to cover the webcam. Intended to function as a bulwark between our privacy and the depths of the internet, this little self-defense mechanism is symptomatic of a much deeper problem than the fear of being recorded doing something embarrassing. We do not employ this technique for its aesthetic value, but rather because it offers a sense of agency in the defense against a perceived intrusive threat. But who poses this threat? In the complexity of contemporary communication technology, it is becoming increasingly difficult to ascertain who watches and documents what we do online. Is it friends and family? Internet service providers? Is it possibly one of the many government agencies with a stake in digital data? While this question is hard to definitively answer, it certainly influences and shapes how we act in certain contexts, with the aforementioned piece of tape being only one minor issue.

The piece of tape is emblematic of one way we deal with our concerns, yet we willingly participate in all sorts of other online activities that readily lend themselves to surveillance practices. Many of us use at least one of the many available social media platforms, mainstream search engines, or electronic payment methods, to name only a few examples. Out of this, the question at the center of this article arises: are we simply unaware of many aspects of surveillance, and therefore do not conceptualize what we do as potentially problematic? Or are we left without alternatives, when we want to fully partake in all fields of 21st century culture, except to use what few options we

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have to feel a fragile sense of security, even though unease befalls us every time we are confronted with news about malicious surveillance practices? In an effort to answer these questions, we formed the following two presuppositions: First, that people are widely unaware of surveillance in its different forms, and second, that there is a basic level of insecurity regarding surveillance, which is catalyzed further by raising awareness.

Because of the constant exposure to dystopian fiction that one faces in popular culture as well as in academic discourse, it would seem that people should be aware of potential contemporary surveillance techniques that have developed. Surveillance practices in dystopias have already become reality in the past, and research suggests that our world is becoming increasingly unpredictable when it comes to digital data and other information about ourselves which closes the gap between fiction and reality. This leads to our third hypothesis: The line between what is fact and what is fiction is becoming increasingly blurred, causing people to struggle to differentiate between what is already part of their lives and what has not found its way into reality (yet).

In order to examine the effects that popular culture, dystopian fiction, and the awareness of surveillance practices have on people in academia, we conducted a study among scholars of the Justus Liebig University Giessen. Well aware of the fact that most of the participants have at least heard of dystopian fiction in their academic careers, it was particularly absorbing in how far these scholars take action against surveillance, if and to what extent they value their privacy, and how they have been influenced by the fictional depictions of surveillance that they have previously encountered. In 1975, Michel Foucault conceptualized what has long since received widespread acceptance: His description and understanding of the panopticon has had a great impact on the surveillance discourse, portraying the observed as the subject of power. Panopticism describes a system in which power is de-individualized, automatized, and made invisible, leading to self-disciplining and the modification of behavior due to the potential of being under surveillance at all times. Taking this consideration and others into account, the question is not necessarily what Big Brother does, or who he is, but whether or not we can find him among us in surveillance practices that we force upon ourselves.

#### 2 From Prison to Participation: Conceptualizing Surveillance

To understand how surveillance practices interface with our personal experience and how one might be able to conceptualize them, it seems beneficial to first retrace the development of surveillance studies, starting with Foucault's notion of the panopticon. Among scholars in this field, the term panopticon calls to mind a clear image: a circular building with individual cells on multiple floors, all oriented towards a central point where a watchtower is positioned. Light only permeates the cells on the perimeter, while the center of this building is shrouded in darkness. During the eighteenth century, utilitarian Jeremy Bentham envisaged this structure as a penitentiary among other kinds of Panoptica. His vision was to create a "new mode of obtaining power of mind over mind in a quantity hitherto without example," 1 marking a paradigmatic shift in the architecture of penal institutions. While prisoners were once incarcerated in dark dungeons, the panopticon envisions well-lit cells that no longer offer the individual the privacy of darkness, which Foucault describes, attesting that "visibility is a trap." The intention of the prison's spatial and illuminative concept is "to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power." It is therefore the aspect of visibility and the fear of possible repercussions for deviancy in itself, rather than any direct demonstrations of power, which inhibits inmates from transgressing any behavioral lines. Thus, the prisoners ultimately become their own guards and the penal system is internalized, according to Foucault: "He who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power." This, Foucault argues, is at its core the constitutive factor for discipline.

In this distribution of power lies the value for the panopticon as a model of surveil-lance. It is certain that Bentham's blueprint has had more widespread consequences than he originally intended. Foucault claims that "the panopticon must not be understood as a dream building: it is the diagram of a mechanism of power reduced to its ideal form." The panopticon, consequently, can be applied as a backdrop onto which power hierarchies are projected. One major shift in the application of panopticism, however, is the developments that modernity has brought to the means by which the central observing entity operates. Through "scientific methods of registration, record-keeping and normation through exams," individuals become regarded as "units of information that can be moulded" with this unit of information being conglomerated

through the means of surveillance.<sup>6</sup> The metaphorical watchtower has also changed dramatically, becoming "a transparent building in which the exercise of power may be supervised by society as a whole." Finally, the personnel who formerly enforced those principles upon which the panopticon functions have become obsolete, as they have been replaced by technology. "Normation and internalisation of 'doing good' are achieved through cameras, and citizens in public space can thus be moulded into behaving according to the norm."

Even though the concepts of panopticism were and still are widely applicable to concepts of analogue or natural surveillance, 9 its foundations crumble under the weight of late twentieth and twenty-first century technological developments. Concepts such as dataveillance and surveillance capitalism pose new, more complex issues which can no longer be sufficiently explained and reconciled with the simple metaphor of a central guard tower. While surveillance is still undoubtedly omnipresent, it is no longer carried out by one entity — the disciplinary society, according to Foucault — which further exacerbates the uncertainty one feels in regards to surveillance practices. Still, Foucault has managed to construct a timeless premise of how surveillance works by dividing actors into categories of the watcher and the watched. And while many attempts at revolutionizing surveillance discourse have been made during the last decades, "we cannot evade some interaction with the Panopticon, either historically, or in today's analyses of surveillance." <sup>10</sup> While Gilles Deleuze and Félix Guattari propose "a series of new places of power to conclude that the socio-technical landscape has changed," the panopticon "is not explicitly [...] dismissed." <sup>11</sup> In this proposed control society, the individuals are divided into consumers and their purchasing behaviors, in order to create data banks and representations of individuals that are "important to monitor and control." 12 As opposed to Foucault, who, in the classic panopticon, anticipates a disciplinary society, Deleuze proposes a model that indicates a shift towards "societies of control," <sup>13</sup> in which the use of codes is the underlying principle, replacing individuals as a whole.14

Kevin D. Haggerty and Richard V. Ericson, on the other hand, come up with an entirely different model that seeks to pertinently incorporate modern technology into surveillance discourses:

[T]he panoptic metaphor should not be over-stretched beyond recognition when trying to capture the new and different forms of surveillance today; rather, a new set of analytical tools is required. <sup>15</sup>

The surveillant assemblage put forward here may consist of virtually all phenomena that function together in the process of surveillance. <sup>16</sup> Hence, an assemblage can be considered a compilation of "heterogeneous objects, whose unity comes solely from the fact that these items function together." <sup>17</sup> The contemporary surveillant assemblage is a machine-dependent process, since it breaks down the observed human body into myriad components in order to create "data doubles of pure virtuality" that aim to represent a concrete individual. <sup>18</sup> The data double is then yet another assemblage used as an object of observation. <sup>19</sup> Further, the surveillant assemblage is an unstable construct that "lacks discernible boundaries or responsible governmental departments" and it "cannot be dismantled by prohibiting a particularly unpalatable technology," <sup>20</sup> making it omnipresent and inevitable.

In a Foucauldian sense, the people who maintain the role of the observed are controlled by their presumption that they are being watched at any given time. In contrast to that, Haggerty points out that the awareness of surveillance "is no longer required for most prominent surveillance projects to achieve their goals," since "many even require secrecy, e.g. dataveillance."21 The term dataveillance indicates that the newest technologies allow for tracing individuals to an extent that was not previously possible. Because of the invisibility of media surveillance, it is becoming "increasingly unclear for individuals where their data resides" and what happens to it.<sup>22</sup> This extended accumulation of information can be observed even more clearly when considering Shoshana Zuboff's concept of surveillance capitalism. While the collection of data takes place without individuals knowing about it or giving consent, its purpose is to predict and modify behavior in order to "[eliminate] the need for — or possibility of — feedback loops between the firm and its users." 23 Zuboff attempts to show how this extraction and analysis of data violates important constituents of democracy, since it uses information for purposes that serve the capitalist environment without considering "foundational principles of self-determination."24

Even though surveillance may be used as a tool to control and observe anyone at any given time, it is not exclusively seen as a threat. On the contrary, David Lyon states that

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other strands of popular culture may not only reassure about the realities of surveillance or support the view that surveillance is a necessary dimension of life today but even encourage deliberate disclosure.<sup>25</sup>

Not only do citizens actively engage in surveillance by watching others, they also increasingly and deliberately take part in the role of consciously being watched.<sup>26</sup> This concept, which Anders Albrechtslund calls *participatory surveillance*, is attractive to many users as it is not seen as a setback, but rather as a cause for approval,<sup>27</sup> as also proposed by Haggerty: <sup>28</sup>

[I]t is increasingly difficult to suggest that surveillance serves a single coherent purpose such as social control, or even a limited set of purposes. Moreover, surveillance can also be enjoyable, since both watching and exposing oneself can be pleasant entertainment activities at times, even playing a role in identity formation.<sup>29</sup>

The many theories surrounding surveillance discourse must be revisited constantly. The concept of the panopticon remains of central value and serves as a metaphor that allows us to "explain how surveillance works and what it does, albeit in adjusted forms." Other concepts pertaining to surveillance such as dataveillance, surveillance capitalism, and participatory surveillance, are attempts to explain an ongoing process of the phenomena of watching and being watched. However, the "development of technological tools implies that concepts of surveillance do need to be regularly re-visited and re-thought, to offer relevant perspectives on how our world takes shape," which also includes the changes within societies and individuals. Just as societies change constantly, so do surveillance practices within them, making it more complicated for individuals to fully grasp the extent to which these technologies interfere with their lives.

# **3\_Cultural Representations and the Perception of Surveillance**

When researching cultural practices, such changes in society inevitably need to be taken into consideration. In order to investigate culture as such, one must clarify what is meant by this term. Ann Gray states:

[c]ulture is understood as being actively produced through complex processes. It is broadly the production of meaning, or 'signifying practice' that happens at every level of the social and at every moment within cultural processes.<sup>32</sup>

Although this abstract definition does not seem to offer clear-cut boundaries between what is culture and what is not, it is an appropriate way to describe the intricacy of the term and its implicated meanings. Cultural studies, consequently, seeks to explain so-

cietal phenomena in detail, making it a discipline that uses methods "somewhere between a sociological approach and ethnographic approaches associated with anthropology" in which 'lived cultures' are studied.<sup>33</sup>

Surveillance is a highly controversial issue that is permanently present in some form in many aspects of culture, and therefore can be investigated with ethnographic tools. Public attention to it, however, oscillates between negligence and outcry. An example of this was seen recently when Facebook founder Mark Zuckerberg was forced to testify in front of US Congress about the social media giant's data privacy practices: The topic of surveillance briefly sprung to public attention and discussion, but quickly was shrouded by something else. About situations such as this one, Lyon argues: "While surveillance offers popular culture some of its dominant themes, our experience of surveillance is itself shaped in part by popular culture." His contention highlights the intricate reciprocal relationship of the two spheres of (popular) culture and experience. Likewise, it is arguably impossible for an individual to know all of the surveillance cultures in existence, so, as a consequence, the perception of surveillance and its implications are, to some extent, molded by popular culture and the media that is consumed.

Evidently, dystopian fiction, as one product of popular culture, particularly lends itself to themes of surveillance and observation. A dystopia can be defined as a nonexistent society [...] normally located in a time and space that the author intended a contemporaneous reader to view as considerably worse than the society in which the reader lived." 35 However, a dystopia's function is also "to critique timely political issues while also locating hope in perhaps unexpected places: sites of resistance both within the narrative and, perhaps more importantly, within those readers who heed its warnings." <sup>36</sup> Consequently, dystopias hold up a mirror to contemporary society, and shape how we perceive modes of interacting with and resisting ongoing sociopolitical developments. Society seems to be in danger of being increasingly desensitized towards intrusive surveillance practices. While the telescreens in Nineteen Eighty-Four most certainly were shocking visions at the time of this novel's publication — and in many ways, remain as such — every major technological corporation (and most popularly, Amazon, with its *Echo*) has some sort of internet-connected home device on the market that relentlessly transfers the data it collects, exhibiting a disconcerting similarity to Orwell's predictions.

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As previously mentioned, a multitude of theoretic frameworks are now either building on or disregarding the panopticon. With the rise of digital surveillance, surveillance practices actually work in every direction, ranging from panoptic to participatory surveillance and the surveillant assemblage. Though ascertaining who actually wields the power of surveillance is becoming increasingly more difficult to than *Nineteen Eighty-Four* makes it seem, the dystopian novel is still highly relevant in another regard. Reflecting on the book, Dietmar Kammerer claims: "As a literary novel, *Nineteen Eighty-Four* is not so much interested in the outer appearance of surveillance society, but in the psychology of surviving in it." As such, it is the subconsciously internalized conformity to set rules and the resulting fear of being deviant — as proposed in the Foucauldian panopticon — that determines how we, the surveilled, behave in a plethora of contexts. In this way, literary depictions of dystopias have an inherent value for their readers. Individuals are able to project their subjective experience onto characters in dire situations, and are presented with diverse modes of thinking, interacting, and resisting.

In the tradition of *Nineteen Eighty-Four*, the British anthology series *Black Mirror* draws from this psychological landscape, and builds upon technological developments that offer either welcomed enhancement or dreaded interference for human life:

This area — between delight and discomfort — is where Black Mirror [...] is set. The 'black mirror' of the title is the one you'll find on every wall, on every desk, in the palm of every hand: the cold, shiny screen of a TV, a monitor, a smartphone.<sup>38</sup>

Every episode of *Black Mirror* (in the four seasons that have aired to date) focuses on a different dystopian vision of new technologies, and presents dramatic scenarios that leave the viewer with a feeling of unease. Most of the time, however, it is not the technology itself that has gone rogue, but rather its users, misusing or abusing the systems, whose actions lead to tragic consequences. This is one of the reasons why the dystopias in *Black Mirror* seem so compelling and eerily prophetic.

One of the many focal points of *Black Mirror* is surveillance, panoptic as well as synoptic. The third episode of the first season, *The Entire History of You*, <sup>39</sup> centers around a jealous husband who slowly unravels his ironically nicknamed wife Fi's extramarital affair, using visual memories saved on subcutaneous implants called "grains." Even more striking than the consequences that this sort of technology has for

close social relations is one scene from the opening minutes of this episode. The protagonist enters an airport where security personnel scan a certain amount of his memories to determine whether he is allowed to board his plane or not. In the context of criminal intelligence and privacy concerns, the implications of this procedure are especially severe. This is even more clear when a dinner guest is forced to explain that her "grain" had been stolen or "gouged" and, with it, all her memories, for somebody else to peruse.

Another episode of *Black Mirror* focuses more on participatory surveillance and its socioeconomic repercussions. In the third season episode *Nosedive*, 40 the female protagonist goes to great lengths to increase her peer rating score on social media in an effort to be deemed eligible for certain real estate, evoking the social credit system that was recently implemented by the Chinese government. Yet it is not only this type of renting and purchasing that has a certain cutoff threshold: As she finds out later, exclusive air travel and experimental cancer treatment are also only accessible to a selected social elite. In an unfortunate series of incidents, the protagonist's score plummets so dramatically that she is treated like a societal outlaw, and, ultimately, is incarcerated. This certainly calls to mind panoptic overtones: Obsessed with her rating, the protagonist is hell-bent on not deviating from a certain internalized societal norm that, in her mind, ensures her a desirably high rating. What is more, the "Prime Influencer's Programme," which she would have needed to be granted access to her desired accommodations, evokes so-called 'influencers' on synoptic social media, i.e., individuals with considerable followings who cooperate in viral marketing strategies with a certain range of mostly lifestyle brands. The premise is that the more people a person can reach — the bigger their clout — the better their access to certain services and products is.

Our last example, *Black Mirror*'s third season finale, *Hated in the Nation*, <sup>41</sup> tackles two major issues in tandem: internet vigilante justice, and the discourse on choice between loss of rights and security regarding surveillance. In the near-future presented in this episode, bees face immediate extinction and are replaced by so-called "Autonomous Drone Insects" (ADIs) throughout the United Kingdom. When two gruesome deaths occur as a result of these ADIs investigators are drawn to the corporation that is responsible for designing, producing and — to an extent — operating the synthetic pollination devices. It soon is discovered that a former employee is trying to teach the public a moral lesson by letting them decide on social media who is to be executed

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next. A specific hashtag with a picture of the victim of choice is posted so that the *persona non grata* mentioned most frequently is killed by the drones. Only after the prime minister finds himself on top of the death list is the government's collusion in surveillance practices utilizing the devices revealed: "We had to consent to permitting government security services access to the visual feed at times of quote, 'increased national security.' Which is, as I understand it, pretty much all the time." With this admission, the mastermind behind the ADIs not only catalyzes the plot but also evokes in the viewer a fear — perhaps irrational — that behind every electronic device that is intended for good, something more obscure and possibly dangerous could hide. As it turns out, the bee-replicates are thus vessels for two agendas: vigilante justice and government surveillance. While the former is the more immediate threat, the latter is presented as an undesirable but inevitable adjunct.

Ultimately, the question arises whether these sorts of pop-culture depictions of surveillance simply heighten our awareness of the issues proposed in cultural discourse, or if they render it virtually impossible to differentiate between fact and fiction by blurring the lines of what is real and what is — at least for now — not. The bad taste that this consequently leaves in people's mouths after every consumption potentially alters the way we live our lives substantially. Nonetheless, Peter Marks argues that dystopian visions like the ones presented "have a built-in counter-narrative that can inspire us to question and resist negative trends while critically assessing any changes presented as positive." An investigation into this phenomenon seems, then, to be warranted, considering the cultural significance outlined above.

#### 4 Quantifying Dystopia: Study Design and Results

The study originating from the research presented above was conducted in the summer of 2017 via an online survey containing 36 multiple choice questions that were constituent parts of three different categories. The format for the survey was chosen for the unambiguity of its results, and for the sample size that could then be considered. While an interview would have allowed for a deeper understanding of given answers, and for reorganizing different questions and wordings, this would have altered the outcomes substantially. Hence, the use of an approach in which we did not interfere with questioning seemed to be most efficient and least intrusive. Since it was the participants' subjective views on surveillance and its different forms being assessed, their individual

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understanding of the questions, asked without further interference, was a positive consequence rather than a drawback.

The questionnaire was distributed online by using a mailing list internal to the university, reaching as many university students and staff members as possible. That the mailing list is an internal tool used to contact those students and staff members interested in surveys and experiments could be considered one of the downsides of this case study, as it was restricted to answers by staff members and students who had already signaled interest in the subject of surveillance, and who were willing to participate without reward. In this aspect, the survey participants did not completely represent the entirety of university students and staff members. However, there are many differences to be found in answers given by those interested in surveillance discourse, which suggests that, while not being representative in a strict sense, the survey nonetheless provided a cross-section of university students and staff members' attitudes.

To ensure easier navigation and orientation for the user, the items found in the online questionnaire could be roughly grouped into three categories: questions of fact or fiction, personal perception of surveillance, and demographics. Fact-or-fiction-items were designed to challenge the user's ability to distinguish between (dystopian) fictional scenarios and practices and those already in use. Participants were given only the following instructions, and this brief, simplistic description of dystopian literature:

Please decide whether the following scenarios fit your perception of the world or if they are taken from dystopian literature. (Dystopian literature is usually defined as science-fiction that depicts a negative image of the present or future.)

These questions become even more challenging through a third possibility: that the fictional scenarios or practices might also have been based on factual precedent. This option was added to ensure that, rather than simply opting for tendencies, participants could instead express a more neutral stance.

The first item in this category requires participants to determine the veracity of the following statement: "There are cameras or other recording devices at all workplaces that monitor the employees' actions." While this description clearly evokes the image of Winston's workplace in the Ministry of Truth in *Nineteen Eighty-Four*, a *New York Times* report suggests that research in this field has already been successfully conducted:

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Ben Waber is chief executive of Sociometric Solutions, a start-up that grew out of his doctoral research at M.I.T.'s Human Dynamics Laboratory, which conducts research in the new technologies. Sociometric Solutions advises companies using sensor-rich ID badges worn by employees. These sociometric badges, equipped with two microphones, a location sensor and an accelerometer, monitor the communications behavior of individuals — tone of voice, posture and body language, as well as who spoke to whom for how long. 44

Another item in the survey, "There is no place in which I am not exposed to surveillance," again draws heavily from the quintessential surveillance dystopia Nineteen Eighty-Four, though with today's smartphones, social media, and more analog forms of surveillance technology, one could indeed argue that surveillance has become ubiquitous. A third survey item, "There is an institution that collects data on my health and prescribes lifestyle changes accordingly," is taken from the medical examination and exercise regime that flickers on Winston's home telescreen in Orwell's novel, but also implicitly alludes to the Krankenkassen central to Germany's health care sector.

The following group of scenarios focuses largely on technological developments of the last decade, including devices such as smartphones with voice-control features programmed into their operating system, or the Amazon *Echo* mentioned above. It begins with the statement: "I own or could purchase a device that communicates with me and is connected to the internet." The next item targets the centerpiece of many living rooms around the globe: "TVs are capable of sending audiovisual recordings to their manufacturers." In early 2017, Forbes Magazine exposed TV-Manufacturer Vizio for collecting image-data, though this was not the first instance of similar commercial datamining practices:

In 2013 LG admitted that voice data was still being captured and transmitted even if users had denied consent for this to happen. And in 2015 there was concern after it was found that Samsung TVs were also recording and sending home 'living room chatter.' 45

German news media reported on the so-called Bundestrojaner, a piece of legislature evoking Odysseus's witty stratagem in Homeric epic, which would enable utilization of surveillance software in terror prevention. Similar to the hero's plan to infiltrate the Trojan stronghold by means of the wooden horse, German authorities could use the software to secretly target mobile phones of presumed terrorists. As such, a related statement was introduced into the questionnaire: "The government uses software to legally wiretap conversations and to collect data."

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The following three items were drawn from the scenarios evoked in *Black Mirror* episodes *Hated in the Nation, The Entire History of You*, and *Nosedive*, respectively: "The government uses micro-drones for surveillance purposes"; "There are implants that can save and replay audio and video recordings"; and "The more popular one is on social networks, the more likely one is to obtain access to exclusive products and services." Additionally, another scenario has been included, as its implications are pertinent not only in the context of surveillance practices, but also for cyber security in general: "My actions on the internet could be used to blackmail me." In the *Black Mirror* episode *Shut up and Dance* <sup>47</sup> an adolescent is forced to carry out orders remotely transmitted to him after a computer virus records him interacting red-handed with compromising media. Even innocent users might similarly be extorted using private information that is not incriminating per se, but rather sensitive.

In another category, participants were asked to assess to what extent they agree with 15 first-person statements designed to represent common uses of online interaction that could be linked to a wide range of surveillance practices. Some of these statements also pertained to the application of various different complexities of counter-practices to surveillance, or, conversely, the lack thereof. A final category consisting of a few questions regarding contextual and demographic factors were positioned before and after the two main sections. Of special interest here were the ways in which the security that participants felt relative to surveillance was transformed and shaped by how accurately they believed they were able to distinguish between factual and fictional surveillance scenarios.

Ultimately, the online questionnaire was completed by 152 participants from several different fields of studies across the university. Of these volunteers with a mean age of 24.4, a considerable majority — 62.5% — identified as female. The youngest participant was 18 years old, and the oldest counted 47 years of age. The three hypotheses put forward at the beginning of the case study were evaluated and analyzed through its results; ultimately, it was possible to verify some of these claims, but we also encountered other unexpected outcomes.

Our first hypothesis suggested that people are widely unaware of surveillance and its different forms. Participants in this study had very different ideas of whether they were aware of cameras in public places, with 44.7% tending towards awareness, 32.9% towards unawareness, and 22.4% unsure of whether or not they were always

aware of surveillance cameras. Another statement that the participants had to rate concerned a different kind of observation, one that could also be considered as a surveillance technique: the presence of and observation by the police. Out of the 151 participants who rated the statement "I feel paranoid when a police car is nearby," 35.1% either chose to totally or partly agree with it, while 48.3% did not notice a significant change in their feeling of scrutiny. This outcome shows that not every person seems to consider the police a part of government surveillance, or an institution that is constantly observing the general population. Such a claim was also supported by the result of the statement "I do not mind being under surveillance at all times": only one person did not mind total surveillance, whereas the majority (77.6%) either totally or partly disagreed with that statement. Considering that most people are not fond of being under surveillance at all times, they would likely not feel indifferent when seeing a police car if they considered the police to be a constant threat to privacy. Since this was not the case, as shown above, it seems that observation by the police is not perceived as a typical surveillance practice.

As mentioned above, we also asked participants to differentiate between fact and fiction. While the statement, "There is no place in which I am not exposed to surveillance," was categorized by 65.8% of participants as dystopian fiction, people rated the statement "My mobile phone is within reach at all times" as follows: 71.1% total or partial agreement, 11.2% neutral responses, 17.8% total or partial disagreement. Consequently, it would seem that the vast majority of the university population keep their phones within reach at all times but do not consider these devices to be threats to their personal privacy, as depicted by the dystopian idea of constant surveillance. This goes to show that while everyone is aware of the ability of phones to record anything audiovisually, they do not think that it is used for purposes of surveillance, nor do people consider their own or their peers' actions as a kind of surveillance. If participants instead considered their own self-observation, tracking, and sharing of personal information online as participatory surveillance, one could assume that the percentages suggesting "reality" for the statement above would have been higher. Another interesting result of the survey was that an overwhelming majority of participants did not know what happens to their data on the internet: 73 % partly or totally agreed that they lacked knowledge on this matter, whereas 17.8% were partly or totally confident that their data was not used for other purposes than those they authorized. All of these findings

display various levels of participant awareness and ability to judge when, and by which tools and institutions, they are being observed.

Our second hypothesis, "The lines between fact and fiction are becoming increasingly blurred" led to an investigation based on *Black Mirror*. While the concept of implants that collect data is not entirely new, the episode *The Entire History of You* displays this in a very captivating way. Correspondingly, we asked our participants to decide whether the statement "There are implants that can save and replay audio and video recordings" was dystopian fiction, reality, or both. Approximately half of the participants (51%) sorted this into the dystopian category while 20.5% believed it to be reality, and 28.5% perceived it to be both fact and fiction. The lines between fact and fiction become especially blurred in regard to this item. People do not seem to know whether what they see on television is or is not part of their culture, which divides their judgements almost exactly in half.

Another statement the participants had to classify made a connection to the episode Nosedive, insofar as it proposed that "the more popular one is on social networks, the more likely one is to obtain access to exclusive products and services" and asked whether participants considered this a real or fictional statement. Almost half of the participants (46.4%) regarded this as reality, 25.2% saw it as dystopian fiction, while 28.4% saw this occurring in both fiction and reality. More than 70% viewed the possibility of popularity being a factor in the availability of exclusive products and services as reality. This is a particularly vital finding, since this relatively new phenomenon has the potential to completely change the socio-economic status quo, calling into question the control someone has over one's own data and how this participatory surveillance, depicted in its extreme in the Black Mirror episode Nosedive, affects one's life.

In this study, Hated in the Nation also serves as an episode that illustrated the idea that micro-drones could be used as a surveillance tool. A considerable amount of the participants categorized the notion of the government using micro-drones for surveillance purposes as reality (16.4%) or both fiction and reality (24.4%). The majority (59.2%) opted to declare it dystopian fiction. Even though most participants felt secure about the government not using such techniques, it was revealing that many people could envision this kind of subtle and obscure surveillance happening in their everyday lives. Ultimately, all of the results above demonstrate a notably split distribution between those who rate given statements as fiction and those who consider them reality.

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Regardless of the accuracy of specific judgements, then, this is indicative of the uncertainty of participants' uncertainty as to whether these measures of surveillance are a result of screen writers' and authors' creativity or whether they are already in place today.

In the course of the study, the participants were also asked to rate their affinity towards science fiction literature. This question was posed in order to decide whether the ability to differentiate between fact and fiction was altered, positively or negatively, by whether or not participants consume science fiction on a regular basis. As a result, 42.1% of the participants totally or partly agreed to being invested in this genre, 17.8% had a neutral answer, whereas 40.1% did not consume science-fiction regularly. Hence, this study proved successful in representing not only one cultural demographic, but rather groups of varying interest in this regard.

For the last hypothesis, "There is a basic level of insecurity regarding surveillance that is catalyzed further by raising awareness," we asked participants about their perceived ability to distinguish fact from fiction at both the beginning and the end of the survey, in an effort to determine if they were becoming more insecure after being made aware of different possible surveillance practices. Contrary to our assumptions, the perceived average distinguishing ability did not change significantly in the course of the survey. When starting the questionnaire, the participants rated the statement "I am able to distinguish between fact and fiction" at an average of 4.2, with 4 being "I partly agree," and 5 being "I totally agree." After the survey, the statement was rated insignificantly lower than before, at an average of 4.01. Even though this does not show to what extent people are affected by their awareness of surveillance, some results and statements were unambiguous in showing that there are measures taken by people in order to make their privacy and online presence more secure.

What is most striking in this regard is the following unexpected paradox that manifested itself in the results. Users of the social networks, which are defining features of the Web 2.0, while worried about their data security, seem only to employ superficial and seemingly arbitrary security measures against cyberspace surveillance. A considerable majority of participants expressed uncertainty regarding third-party use of their data online (74.3%) and the safety of their online presence overall (65.8%). Moreover, when asked if they did not mind being under surveillance at all times, participants expressly negated this proposal (77.6%). Consequently, participants expressed having

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taken some precautions in this regard. The majority of participants answered that their profiles on social media platforms are set to only be accessible for their close friends (78.9%), and asserted that they would not deliberately reveal their locations while uploading photos to said platforms (82.9%). These, however, are only superficial measures of caution, since privacy settings on social media platforms are ultimately only effective to a certain extent, and image data captured on devices like smartphones often are automatically equipped with a geotag in the files' metadata.

The arbitrariness of these few security measures crystallizes further when examining the following results. A considerable number of participants revealed their habit of covering the built-in webcams of their laptops (61.8%), while still agreeing that they kept their mobile phones or smartphones within reach at all times (71.1%). What is more, only a small number of individuals seem to utilize alternatives to the mainstream messengers WhatsApp and the like (28.2%). Consequently, a clear trend can be observed among participants regarding a certain readiness to subject themselves to possible harm or negative side effects in order to participate on social media and Web 2.0 as a whole. This finding might call to mind an exchange of Bourdieuan capital, 48 i.e., economic capital or in this case, data capital for social capital 49 — privacy for participation.

#### 5 Conclusion

In an attempt to classify the different types of surveillance, many assumptions and cultural practices have been assembled into what we now know as surveillance discourse and theory. The universal classic among those theories remains Bentham's and Foucault's panoptic notions, developing theories of this unique prison system that support the idea of the one watching the many. Yet, this is not the only approach that is relevant in contemporary surveillance discussions. Other scholars such as Haggerty and Ericson, Deleuze, Lyon, and Zuboff, to name only a few, have established further concepts that have notably influenced the traditional notion of surveillance. While none of the theories introduced in the first sections of this article can be completely disregarded, a change in emphasis throughout time can be easily detected. The shift we can see today from theories of the panopticon to theories that involve the online presence and data of the general population, as well as participatory surveillance that also supports dataveillance and the observation of oneself, is immensely pervasive and calls into question

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whether surveillance is only an issue encompassing the government watching the population, or whether surveillance occurs first and foremost among ourselves.

As part of the case study described in this article, we tried to establish a connection between the general awareness of surveillance practices and the ability to distinguish fact from fiction. The outcome showed that the lines between reality and dystopia are, in fact, becoming increasingly blurred, while the understanding of surveillance and its different forms play an integral part in what is seen as acceptable in contemporary society and what is not. As a matter of fact, our participants felt as if the safety of their online presence was becoming progressively jeopardized, yet this did not incite a radical change in their behavior. While some seemingly arbitrary measures are being taken, such as covering the cameras on laptops and webcams, other precautions are not being considered or implemented. Further, the cost at which our participants were willing to participate in social online activities becomes clear: Even though most people did not know what happens to their data on the internet, they were willingly abandoning their online privacy, and sometimes even voluntarily revealing large amounts of information about themselves.

While this case study covered some ground in surveillance discourse in popular culture, there is still much room for more detailed interpretations and studies in this regard. In future studies, the alteration of some aspects of our survey would provide more significant outcomes in making the connection between the reality of our daily lives and dystopian fictions. For example, another, perhaps larger sample could prove more representative of the general population; different age groups might also be of particular interest when the focus lies on the perception of surveillance by digital natives as opposed to digital immigrants. Another aspect that might bring about a new perspective is the connection between participants' affinity for science fiction and the accuracy and correctness by which they distinguish dystopian fiction from reality. In this regard, a qualitative approach might be of use.

The question remains whether we, as subjective individuals, are capable of monitoring the shift towards participatory and self-surveillance, or if we are merely subjected to this cultural change. In the future, it will become increasingly important whether or not we allow ourselves to be overpowered by the prevalence of online data, and if, as a result, we let dystopias become our reality.

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