

## Article

# Surveillance in Practice: Operators' Collective Interpretation of CCTV Images

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## Abstract

CCTV surveillance is a cultural practice and collective effort. CCTV not only involves a technical assemblage that is used to discipline the surveilled, it is also a social assemblage in which the informal practices of operators play a major role in the multiple interpretations of images. This paper provides insights into the daily work practices and discourses of CCTV operators and their supervisors through observations of and interviews in the control room of public CCTV surveillance in Rotterdam. By providing a better understanding of the role of people in socio-technical assemblages, this paper contributes to the discussion on human mediation in computerized networks. The paper contributes to the expanding literature on surveillance as a cultural practice by combining insights on social sorting with insights on collective evaluation of unfolding situations—i.e., how group dynamics within the control room influence how people are “judged.” Building on Goffman’s frame analysis, the paper reveals the crucial role of talk and humor in re-performing what happens on the streets as well as evaluating situations and the people watched. Moreover, it discusses how these collective re-performances of what is being watched both reproduce and reshape “othering” practices within the control room. The paper shows how humorous utterances play an important part in overcoming hierarchy and collectively managing emotions, and explores how this humor influences profiling on the basis of bodily appearance.

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## Introduction

Rotterdam on a warm night in June, following a day of festivities. A group of youngsters throw bottles at people in a packed square; then they take off, scattering in different directions. The police control room calls out their descriptions. CCTV operators at four tables are working together to keep track of the bottle throwers. The operators’ practices are loosely coordinated by one of their supervisors:

“I’ve got the bottle throwers,” says Hasad, who’s at table one.

“Ambulance to Stadhuisplein” is heard over the walkie-talkie:

“I’ll get him,” says Daniëlle over at table two.

Maaïke asks, “Is there anything to see on [camera] 21?”

“No, not really,” replies John, who’s sitting at table three.

“Wow, a *lot* of blood,” says Hans, focusing on the ambulance.

His neighbor looks at Hans’ screen. “Yeah, a big pool of blood.”

It looks like somebody got hit with a bottle really hard.

“Switch to 4021 and turn it to the right,” one of the operators says to her colleagues. “There, there, there! Antillean, white shirt. That’s one of the alleged bottle throwers.”

John says, “I’ve also got one on 4240.”

“Okay. Who’ll take him? Martin. You take him,” Nuno replies.

“I’ll turn a bit further,” John tells them.

“No, you can’t, there’s a porch in the way,” replies Nuno.

“Okay!” agrees John.  
 Nuno guides John saying, “Keep on the 4021, then.... Zoom out! There’s the Rastaman.”  
 (Field observation June 15, 2013)

This field note excerpt from our research in the control room of CCTV surveillance of the Rotterdam city center demonstrates that monitoring and interpreting CCTV images and taking subsequent action is a socially shared process. Coordinating activities and giving meaning to the images are based on shared skills, discourses, and practices (Heath and Luff 1992).

Both the widespread use of CCTV in urban public spaces and its consequences have received much attention in academic and professional literature, ranging from criminological studies and policy documents on the effectiveness of CCTV (e.g., Webster 2009; Piza et al. 2019) to critical studies on CCTV as part of consumer-oriented cities and neoliberal regimes of control (e.g., Coleman 2004; Murakami Wood and Ball 2013; Cardullo and Kitchin 2019). Much of the academic literature is critical of the use of CCTV, either because its effect on public safety and perceptions of safety is ambiguous (Smith 2004; Zurawski 2010; Brands, Schwanen, and Aalst 2015) or because it undermines individuals’ privacy (Dubbeld 2004; Cardullo and Kitchin 2019) and can lead to the stereotyping of people and groups (Norris and Armstrong 1999; Williams and Ahmed 2009; Coleman 2019). Moreover, numerous studies criticize CCTV for being an expression of, and a contribution to, a society that is based on control, uniform consumers, and an illusion of total safety. Public–private CCTV networks are part of a whole range of interrelated surveillance practices that enlarge the power of both state and private governmental bodies in neoliberal capitalism (Coleman and Sim 2000). These practices contribute to the management of desire in controlled consumption spaces and lead to the marginalization and exclusion of those who do not have the means to appropriately take part in consumption in these spaces (Murakami Wood and Ball 2013).

The emphasis in the literature is on surveillance as a form of control and on CCTV operators as controlling and sorting people on the basis of visual social characteristics by following rules. Several studies on CCTV in practice have, however, indicated that surveillance is not only about control and following rules but also involves play, resistance, and care (Lyon 2001; Smith 2007; Albrechtslund and Dubbeld 2005). Much work on CCTV is based on Foucault’s panopticon, or the surveillance assemblage (e.g., Norris and Armstrong 1999; Haggerty and Ericson 2000; Lyon 2001; Nemorin 2017), and has stressed how socio-technical design and organizational rules structure how watchers relate to those being watched. Several authors call into question this “machinic” understanding of surveillance and emphasize the role of meaning-making in these socio-technical assemblages (e.g., Neyland 2004; Monahan 2011). Smith (2015) argues that CCTV operators are anything but dispassionate rule followers projecting a uniform disciplinary gaze. This is not only because the operator’s gaze is colored by personal background and prior experiences and convictions but also because operators become emotionally engaged in the work of watching and are both agents and subjects of power. They need to find ways to manage their emotions and selfhood, and this influences what they see and how they make sense of what they see. More research is needed on the talk and actions of operators in their daily work to investigate how these operators give meaning to CCTV images through relational exchanges. While Smith (2015) provides meticulous insights into how the work of watching involves the management of both territories of the streets and of the self, this paper will further explore how CCTV images are collectively processed and interpreted by focusing on the role of talk and humor in negotiating practices and discourses within the control room. This will contribute to a more nuanced understanding of how and when the marginalization or exclusion of people occurs, and how such negative effects can be mitigated.

In this paper, surveillance is perceived as a cultural practice: “as embedded within, brought about by and generative of social practices in specific cultural contexts” (Monahan 2011: 496). Cultural practices are not just the context in which tasks and activities take place but are also constituted by a constant process of negotiation between forms of reasoning and conduct (Heath and Luff 1992). The aim is to examine the collective effort of CCTV operators in coordinating the cameras and interpreting what they see. This is important because group dynamics within the control room play a role in how individual operators

understand and react to the images on their screens. To better understand how operators attribute meaning to CCTV images through interactions with others, this paper draws on the theoretical tradition of symbolic interactionism and, in particular, the work of Erving Goffman (1967, 1974). While Foucault's (1991) ideas have shed light on the institutional structure of CCTV systems, Goffman's work can provide more insight into how people are continuously "made up" in the daily interactions of CCTV operators within existing institutional and cultural structures. In other words, Goffman's work allows us to understand how, through talk and formal and informal practices, people on the streets are categorized and their behavior is contextualized. It allows us to address questions like: Is their behavior considered appropriate at that place and time? And what do images reveal about past and future behavior? Frame analysis (Goffman 1974), in particular, provides insight into the negotiation of practices and discourses in the workplace through which different values and rules of behavior are reproduced and normalized. A frame involves the subjective involvement of individuals in a particular activity and can be defined as an organizational practice of both the activity itself and of the minds of those involved who govern the activity. Everyday life and, indeed, work contain differently framed episodes, which structure and are structured by talk. Goffman (1974: 561) exemplifies how a daily life situation is framed by official and informal rules in an organization or system, the enactment of occupational roles, the ritual order of talk, and the bodily management of physical objects. While the structuring effect of official and informal rules in watching practices in CCTV control rooms have received considerable attention, the other aspects, as well as the switching between different frames, are still underexplored.

### **Surveillance in Practice: Meaning-Making Through Talk and Humor**

In their pioneering work, Norris and Armstrong (1999) state that CCTV operators develop a set of working rules to distinguish suspicious from non-suspicious behaviors. They report how these working rules, based on institutional guidelines and operators' assumptions, lead to selective targeting on the basis of age, ethnicity, gender, and perceived class membership. Walby (2005) refers to this as "racialized profiling," which involves a combination of operators' own subjectivity and the rules and values of the organization of which they are part. While social sorting (Lyon 2003) of the population under watch occurs in contemporary surveillance, *how* operators give meaning to what they see on their screens and how they relate themselves to the people they watch are more complex than the categories of "controlling" the surveilled, "selective targeting," and "racialized profiling" might suggest.

First, as Smith (2007) shows in his work on the relationship between watchers and those being watched in several CCTV assemblages, there is no singular and standardized gaze that enforces discipline and control. Instead, the camera operators' gaze is pluralistic and strongly dependent on context. It involves not only prejudice and judgment but also care and compassion. Smith (2007) stresses the importance of the informal workplace culture in the control room and the role of story constructions in the categorizing and defining of people watched. Both McCahill (2002) and Smith (2007, 2015) stress how operators subvert their official roles as detached observers; they divert from official rules and deal with boredom by using the CCTV systems for their own ends and try to break down the technological barriers by interacting with the public. Smith (2007) notes that stories are a way to pass the time, to cope with both tedious and eventful moments, and to give the images meaning. Moreover, narratives give depth and dimension to abstract individuals and events and create a shared sense of reality within the workplace. In this article, the intention is to further develop how narratives—and, in particular, bantering—play a role in attaching value and significance to individuals and events and in determining what is going on and whether or not it is deemed suspicious.

Second, operators do not decide to watch or follow someone on the basis of predetermined rules. Rather, operators re-perform what they think they are watching and so create an account of what is deviant (Neyland 2004). For example, operators watch a man running near a bus station but relate this event to a crime that was committed earlier and was just communicated over the radio. They then call him "a fugitive" and state he is "on the run." This account from the operators is negotiated in interactions with the police and CCTV managers, who inquire about the physical appearance of the man (a tall, white male about twenty to thirty years old), the "props" he is carrying (a small, dark-colored bag), and the direction the man is running in

(away from the bus stand) (Field observation March 2, 2013). Important in this re-performance of unfolding actions is turning what is observed into a verbalized reality (Sacks 1972). Through talking about persons acting or looking different from the general public, police and CCTV operators link these persons to past and future activities (Neyland 2006).

In finding agreement on how to verbalize what they observe, operators have to develop a “working consensus,” or common understanding, of the meaning of unfolding events. In face-to-face interaction with colleagues, story-making and bantering play an important role in making sense of the images watched, and in developing claims to present to the police over the radio. Heath and Luff (1992) stress that what, at first sight, seem to be individual tasks and responsibilities depend greatly on co-constituted processes. This involves interaction with other actors outside of the control room (Heath, Luff, and Svensson 2002), such as police officers, criminal investigators, municipality watchers, and security personnel, and with colleagues and police officers inside of the control room itself (Heath and Luff 1992). CCTV images are understood differently by different workers, even if these individuals are assigned the same tasks or are sitting in the same room. However, in the end, these workers predominantly come to congruent conclusions on what these images mean. In watching over and controlling ongoing activities, the personnel in CCTV rooms and other centers of coordination combine their multiple and diverse perspectives on “what is going on” into a common “frame” through interrelated action, talk, and more subtle forms of interaction through bodily attitudes (Heath, Knoblauch, and Luff 2000). For example, Heath and Luff (1992) discuss how glancing in a certain direction is used to get someone’s attention to an immediate issue. The involvement of operators in what they watch and their assessments of unfolding situations are communicated through talk and action as well as through their posture and facial expressions—i.e., an operator frowns when a man picks something out of a dustbin or leans towards the screen of his neighbor to subtly indicate that attention to some event is needed.

To further analyze how meaning is constructed in these face-to-face interactions within the control room, and to better understand the role of stories and banter in this meaning-making, Goffman’s (1974) understanding of “frames” and “keying” is helpful. Goffman uses these concepts to explain how situated meaning is created by interacting. Frames “provide background understanding for events” (Goffman 1974: 22): situations and the causal relations between them can be interpreted in different ways. A similar situation—a man who falls from his bike—can be framed as an unfortunate accident, a typical action for someone who’s drunk, or a cool stunt. Frames consist of both verbal and non-verbal interaction and both determine and are determined by the activity performed. Understanding and verbalizing what is going on often involves multiple layers and what Goffman (1974: 43–44) calls “keying”: “the set of conventions by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity, but seen by the participants to be something quite else.” This often involves some kind of play or practice, taking an activity less seriously than you should or reflecting on it in a non-serious way. In face-to-face interaction, humor functions as an important key to alter or supplement the meaning of interaction and the situation discussed.

Through keying, subtle interactions in the CCTV control room can alter, reproduce, or ratify the boundaries between “us” and “them,” both within the control room and between watchers and those being watched. As Smith (2007, 2015) notes, operators are physically removed from the action but symbolically and personally present within it. Presumably, the construction of *otherness* is developed and enacted in banal, bodily, and sensuous practices in the workplace. Deviations from the “neutral body” in terms of skin color, age, and gender (Haldrup, Koefoed, and Simonsen 2006: 178) are assessed by those in the control room. This involves differences in power between those in the control room and between operators and the persons being watched. As operators have to deal with these power differences and negotiate how to frame actions, keying plays an important role. Following Bateson (1953), Goffman (1974: 44) states that actions can be framed as either serious or non-serious. A non-serious or humorous frame involves a “metacommunicative message” that there is play involved (Goffman 1974: 44).

Humor makes it possible to explore sensitive topics without the consequences faced in serious conversation; just as fighting can be transformed into play, serious arguments can be transformed into a less harmful discussion. The role of play and humor in social relations and collective meaning-making is central to Goffman's (1974) frame analysis notion and comes to the fore in several micro-level studies of workplace cultures (e.g., Robinson and Smith-Lovin 2001; see Kuipers 2008 and Holmes and Stubbe 2015 for an overview). These studies argue that a humorous frame can generate and sustain shared interpretations (see also Coser 1959). Humor in conversations helps create workplace cultures and reflects such cultures (e.g., Holmes and Stubbe 2015). In this way, humor is not just a time-wasting strategy but reflects and contests differences between groups of people on a larger scale and can play an important role in meaning-making (Kuipers 2008). Through humor, operators can explore and comment on sensitive issues ranging from witnessing excessive violence and suicides to profiling on the basis of ethnicity or social background.

By using framework analysis and focusing on humor, we offer insight into the effects of collective evaluations and group dynamics in the control room on how people are “judged” and “profiled” in public spaces.

## **CCTV in Practice in the Rotterdam Night**

### *Case Description*

We explore the practices of CCTV operators using a case study of a public camera surveillance system in Rotterdam, the second-largest city in the Netherlands with 644,000 inhabitants in 2019 (Gemeente Rotterdam 2019a). Rotterdam is a working-class city and heterogeneous in terms of ethnicity. At present, thirty-five percent of the population is of non-western—primarily Turkish, Moroccan, or Surinamese/Antillean—descent (Gemeente Rotterdam 2019a). The city hosts one of Europe's largest harbors, but is struggling with its transformation from being an industrial city to one that is increasingly based on services and entertainment. The city's relatively high crime rates and the social discontent among its inhabitants have contributed to populist discourses on migrants as threatening Others. Additionally, in combination with the entertainment city's high economic stakes, they have contributed to a zero-tolerance approach to and rhetoric about safety (Liempt 2015). Apart from being the city with the largest number of publicly installed CCTV cameras (Schijndel, Schreijenberg, and Homburg 2010), Rotterdam is the only city in the Netherlands with twenty-four seven live viewing of the footage.

The physical appearance and police organization of *Het Stadhuisplein*, one of Rotterdam's busiest nighttime areas in the city center, clearly reflects this sentiment. The area is a relatively small square with a high concentration of bars and one nightclub that mainly attract a young, lower middle-class and ethnically diverse crowd (Schwanen et al. 2012). While crossing the square, one is watched by fourteen public CCTV cameras and all of the bars have their own CCTV cameras, bouncers, and metal detectors at their entrances (Liempt 2015). Since 2013, *horeca* stewards give visitors information, help to prevent trouble, and reduce potential conflicts.

The stewards are in close contact with the police and, when things get out of hand, the police can intervene quickly (Stichting Veilige Steden 2019). CCTV systems, in combination with police officers on the ground and other surveillance actors, are deployed by many local governments to deal with the tensions intrinsic to economies of pleasure and excess in nightlife districts (Liempt and Aalst 2012). Rotterdam is no exception to this: the Safe Nightlife Covenant—an agreement between the police, the municipality, and the owners of nighttime establishments on measures to improve safety in Rotterdam's nightlife districts that was signed in 2000—provides for special police teams on Friday and Saturday nights and emphasizes the role of CCTV surveillance in dealing with “nightlife excesses” (Liempt 2015). It is these teams, in cooperation with the CCTV operators, that decide what behavior is considered excessive. CCTV surveillance in Rotterdam is a collaboration between the municipality of Rotterdam and the police of the Rotterdam region and comprises an extensive system of over five hundred cameras covering the inner city of Rotterdam, large parts of the



surrounding neighborhoods, and, to some extent, satellite cities such as Spijkenisse and Vlaardingen (Gemeente Rotterdam 2019b).

### *Methods*

Observations were carried out on busy nights in Rotterdam by Heebels. The case can be seen as an extreme one (Flyvbjerg 2006): the extensive CCTV system and the relatively large number of reported crimes mean that the frequency of incidents and the complexity of unfolding situations were presumably higher during Heebels' observations than at most times in many other CCTV control rooms. This enhanced collective action and provided a lot of information on how group processes in control rooms work. Moreover, it was particularly interesting to study how operators in the control room socially constructed suspicion against the background of discourses in Rotterdam that emphasize zero tolerance and cast migrants as "threatening others."

The observations consisted of watching the operators, their supervisors, and their screens during three evening/night shifts, two night-shifts, and several brief visits between November 2012 and June 2013. During the observations, Heebels jotted down extensive field notes, which she elaborated and typed out shortly afterwards. Following Emerson, Fretz, and Shaw (1995), she attempted to describe scenes as vividly and completely as possible, and did her best to record dialogues between people and to make verbatim accounts of these dialogues. In the jottings, she not only described her observations but also recorded her experiences, feelings, and considerations. She also tried to reflect on her role as a thirty-year-old researcher and observer of Dutch origin, who was born and raised in the Rotterdam region but has not lived in the city as an adult.

In total, the observations covered about forty-five hours and were combined with data from semi-structured interviews with the director of CCTV in Rotterdam, six CCTV operators, five supervisors, and a head supervisor. The selected group of interviewees was, in terms of age, gender, and ethnic background, more or less typical of those who work in the control room. One-third of the interviewed workers were female and another third of the workers were of (different) non-native Dutch origins. The ages of the interviewees varied between twenty-five and sixty-two years old. All interviewees were watched during the observations.

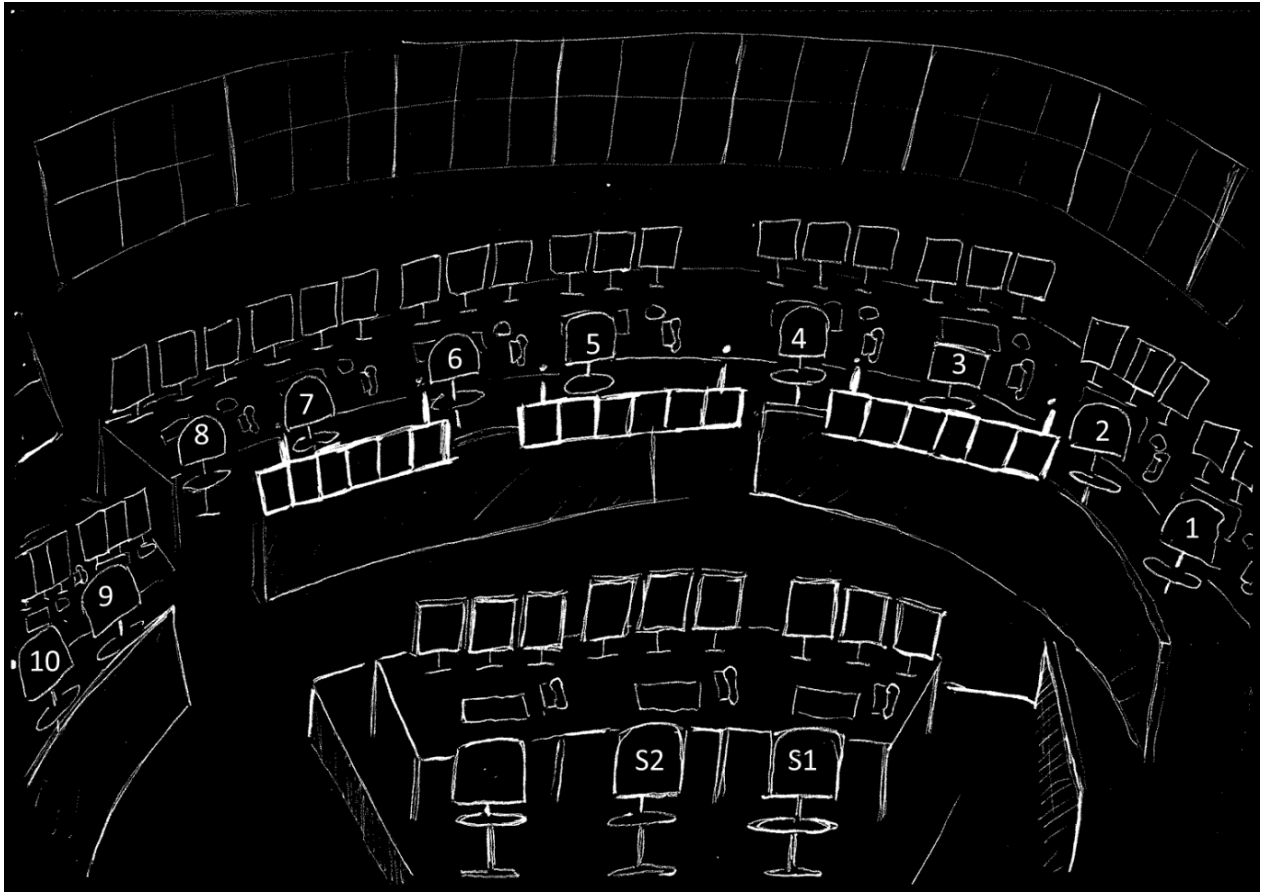
All interviews were recorded and transcribed. The field notes and interviews were in Dutch, and excerpts used in this article have been translated into English by a translator. To assure the anonymity of the respondents, names provided in the excerpts are fictitious. The texts that arose from both the observations and the interviews were analyzed using Nvivo software.

The interviews with the operators and supervisors were used to further develop the themes identified during the observations and to enrich the researcher's observations with the operators' and supervisors' experiences. It has led to a refinement of the identified themes and to new foci, most notably the role of humor in the control room.

## **The Collective Effort of Camera Surveillance**

### *Material and Social Organization of The Control Room*

The CCTV control room is located in a police building in the inner city of Rotterdam. The room is a semi-elliptical space (Figure 1) in which ten operators (community support officers, numbers 1–10 in Figure 1), coordinated by two supervisors (police officers, numbers S1 and S2 in Figure 1), continuously monitor the cameras. A fixed team of usually fourteen operators work each eight-hour shift, and they rotate between ten work stations that each cover a different part of the city. The tables and screens are organized in such a way that adjacent tables cover neighboring areas. The supervisors sit on a platform overlooking the operators and their screens.



**Figure 1:** Schematic drawing of the control room (based on Heebels' field notes).

### *Dealing with "Incidents" and Differences in Competencies and Powers*

Communication and cooperation between operators are important to assess unfolding situations. Whether an unfolding situation is upgraded to an incident—i.e., the targeting of “deviant behavior”—not only depends on a combination of rules and protocols but also on the operator’s judgment and the opinions and actions of others in the control room. Discussions of what happens on the streets are structured by power relations within the control room: an informal hierarchy between “strong” and “weak” operators and a formal one between operators and supervisors. These hierarchies are supported by the physical and social organization of the control room. During the interviews, supervisors said that they attempt to seat experienced, “strong operators” next to less experienced, “weaker” ones. One supervisor said, “if you have three weak ones sitting in a row, you can get your fingers burnt... then you lose or miss suspects” (Interview #13, interview with control room supervisor by Barbara Heebels, June 27, 2013).

The platform and the semi-elliptical shape of the room allow supervisors to oversee the operators and better fulfil their coordination role (see Figure 1) but also create a situation in which the watchers are watched (Newburn and Hayman 2002); the operators watch their screens and the supervisors watch their actions. The operators are also digitally monitored to keep track of their productivity and their moral behavior (Stanton and Weiss 2000). The frequency of their reported incidents is counted and compared with those of others. During the interviews, operators mentioned the importance of reporting incidents. One operator even stated: “the number of observations, that’s what you are here for” (Interview #7, interview with control room operator by Barbara Heebels, June 3, 2013). This also became clear during the observations when, for example, an operator who reported someone urinating on the street was congratulated by his colleagues for the first report of the day (it was just past midnight) (Field observation on March 2, 2013). Although most

operators felt that they were part of the police force and consider many of the supervisors to be good colleagues, they were sensitive to a difference in standing and power between themselves as community support officers and the police (see also Goold 2004: 126–132). This difference in standing affects operators' motivations and hampers communication between operators and supervisors about unfolding situations and how to assess them. One of the operators said that she does not always have the feeling that they are working together: "The screen is suddenly blank and you ask: 'hey, who has disabled my image?' and then a supervisor says: 'oh, I did, it's not important to wait.' You have to communicate things like that so we can learn from them" (Interview #11, interview with control room operator by Barbara Heebels, June 24, 2013).

At the same time, control is not unidirectional or uncontested, neither between watchers and watched (Smith 2007; Walby 2005) nor between managers and employees (Stanton and Stam 2003). On one hand, collective interpretation in the control room involves a constant tension between hierarchy and protocols, but on the other hand, it also involves being able to freely exchange thoughts and practice surveillance as an "art" involving creative skill and imagination.

## The Collective Interpretation of Images

### *Jointly Evaluating Images: The Role of Talk*

Both observations and interviews showed that supervisors and operators informally negotiated what operators watched and followed up on. They jointly decided what was suspicious and, therefore, should be acted upon by verbalizing what they observed and discussing whether it could be counted as an incident. In general, conversations were largely steered by the cameras; in other words, operators talked about what they saw on each other's screens. A dog running loose instigated numerous anecdotes about operators' own dogs, dogs of neighbors, and previous incidents with dogs on their cameras (Field observation March 2, 2013). Storytelling played a role in killing time and in creating a connection to the abstract people and situations on the screen and making them "your own" (Smith 2007, 2015). In addition, conversations were important to evaluating the priority of an incident and to deciding whether images should be put through to either the police control room or a district commander or not put through at all. Operators developed their own way of looking for and evaluating deviant behavior. During the interviews, the operators explained how they developed their own methods for surveying the areas and switching between cameras in a systematic way. While one of the operators commented, "I use the camera as if I walk on the street myself, moving from side walk to side walk and then focusing on all the doors, windows, everything" (Interview #11, interview with control room operator by Barbara Heebels, June 24, 2013), another stated, "I try to keep a bird's eye view as much as possible, keeping the overview" (Interview #12, interview with control room operator by Barbara Heebels, June 27, 2013). Some operators always followed the same camera sequence and paid each camera equal attention, whereas others described how they specifically searched for deviant behavior, either at particular times and places (i.e., camera "hotspots") or by zooming in on groups of youngsters, no matter where or when. What was considered deviant also varied depending on the operators' knowledge of the area and their social and cultural background. Operators with a non-Dutch ethnic background appeared more reflective in terms of how to evaluate people and situations, paying more attention to the social and spatial context in which behavior takes place. For example, while several native Dutch operators immediately targeted a group of youngsters for "standing still" and "making a lot of gestures," a Dutch-Antillean colleague first assessed if the gestures were indeed aggressive and whether standing still was odd at that particular street corner (Field observation April 20, 2013; Interview #11, interview with control room operator by Barbara Heebels, June 24, 2013). Another colleague, born in the Middle East, emphasized that the most difficult thing is "discovering what is not right. I also go out in this area and the people who walk there are normal people like you and me" (Interview #3, interview with control room operator by Barbara Heebels, May 27, 2013). Operators with a non-Dutch background and more experienced operators (in terms of knowledge about certain areas) were more nuanced in their judgements. They felt more connected with the area and with the people who walked around. Instead of concentrating on "catching criminals," they emphasized the importance of keeping the area safe for all people. "It is important to look beyond



stereotypes,” explained an operator with a background in police work. “Recently, two neat, white people beat up a Moroccan youngster. There was confusion about what happened, but I could tell the police officers who arrived what had really happened” (Field observation March 2, 2013).

### *Jointly Processing Images and Overcoming Differences: The Role of Humor and Workplace Culture*

In collectively giving meaning to events and processing the images watched, operators and supervisors often relied on humor. The role of humor in framing action and talk in the control room is threefold. Firstly, humor generated shared interpretations in the control room:

Edwin, one of the operators, is watching a boisterous youth. On the screen, I see a boy of about 15 hitting shop windows with what looks like a homemade club. He looks more bored than aggressive. The operators and the supervisor talk about the boy and what exactly he has in his hand. “Looks like he’s got something in a sock, mate.” Amir’s worried that the “club” might go through a window. Others joke that the club’s not hard enough for that. Natalie confesses that she once made something like it, “but not so hard.” There’s laughter. They chat away quietly and more jokes are made about the club. Finally, they decide that the youth doesn’t pose a threat, which is the way I see things, too. (Field observation November 29, 2012)

Humor was an important part of the workplace culture within the control room. By commenting on unfolding situations in a joking manner, operators together made sense of situations and developed collective solidarities: “we are almost like a family” (Interview #2, interview with control room operator by Barbara Heebels, May 27, 2013).

Secondly, joking and bantering are used as strategies to deal with differences in hierarchy and perception without the requirement for much effort or distress. Humor helps to create solidarity and group identity and can both be resistant to and compliant with social control (Kuipers 2008). In the control room, jokes appeared to be an effective tool to overcome the divide between “weak” and “strong” operators and to evaluate fellow operators without being offensive or too critical.

Several authors on humor in the workplace have similarly stressed how joking can narrow differences in status and bring people in different power positions closer together (e.g., Coser 1960; Kangasharju and Nikko 2009). As Pogrebin and Poole (1988: 194) note in their study on humor in police organizations, joking “provides a means by which subordinates can express dissatisfaction with superior officers or with the organization itself.”

At the same time, supervisors often took the lead in bantering to show that they were part of the group but, at the same time, in control. People in higher ranks in organizations use humor strategically to show both solidarity and their power in the work place. Kangasharju and Nikko (2009) describe how managers take up a role as entertainer in workplace meetings, while Rogerson-Revell (2007) shows how, in intercultural business meetings, business leaders use humor to construct a position of respect and enhance their status within the group. Humor does not erase differences in standing or ways of working but tries to bridge these by adding a non-serious frame to the situation. Rules and power relations are socially defined and can be redefined in different situations (Manning 2008).

Thirdly, humor plays an important role in displaying and developing affective relationships with the people watched. Operators did not perceive the people on the street that they watched as merely physical entities but were affected by their bodily appearances. Through watching persons and situations and telling stories and jokes about what they watch, operators display and develop affective sensations. These sensations might include joy and love but also involve boredom, anxiety, and frustration (Smith 2007). Bantering and playful tactics have an important role in helping operators deal with the, sometimes boring, hours in the control room (Smith 2007; McCahill 2002) and, at the other extreme, in processing violent or shocking images and

situations (Smith 2015). Jokes are used as an emotion management strategy to deal with intense emotional labor (Sanders 2004), such as being witness to accidents, violent crimes, or suicides. As one interviewee said, “Well, you just cannot take it serious. Last week a man jumped off a bridge, and I watched his dead body being pulled out of the water by the police, with a rope still around his neck. Then I said: ‘he just forgot to tie it to the bridge.’ You just have to find a way to put things in perspective” (Interview #5, interview with control room supervisor by Barbara Heebels, May 27, 2013).

### *Talk, Humor, and Affect: The Reproduction and Reshaping of Established Norms and Values*

Humorous utterances and affective sensations can play an important role in deciding if someone or something is suspicious. As we have seen, the gaze of CCTV operators is not detached and rational but involves emotions as a way of relating to the bodies watched on the screen within the social and organizational environment of the control room. Encounters with strangers in urban public space are loaded with emotions and involve processes of objectification of the other and feelings of being objectified (Robins 1995). Similarly, operators’ affective gaze involves being with strangers and the objectification of people. This includes the use of “us” versus “them” binaries and the identification of people as threatening *others*. For example, Heebels observed, “One of the operators, a small guy of Indonesian descent, watches a young man with South-Asian features coming out of a club and starting to argue with a group of tall men presumably of Surinamese origin and exclaims: ‘Oh stop it, boy, be careful. These black guys are huge’” (Field observation June 15, 2013).

It also includes considering particular people as being in or out of place on the basis of their skin color and ethnic appearance:

The police ask the CCTV operators to check the activities of two boys coming out of a building. Edward focuses his camera on the two white males, seemingly in their early twenties, wearing baggy pants. One of them wears a winter cap, the other one has long blond hair. They carry around some large objects; I think probably they are moving house. “This probably means nothing,” Edward says to me, “they are artistic types.” He then continues, “but they could be drug dealers” pointing at three youngsters of what appears to be Moroccan descent and with short haircuts who happen to pass by on the same street. (Field observation December 29, 2012)

These excerpts show how operators framed people and their actions on the basis of affective sensations and talk. Through corporeal attitudes and ways of speaking, borders between “them” and “us” are redrawn, reproduced, and enacted. In addition to perceived ethnicity or race, “othering” and selective targeting in the Rotterdam control room also occurred on the basis of differences in gender or sexuality. These “othering” gazes of operators were, however, not uniform and stable and were often the subject of negotiation. While, in above example, the operator’s understanding of “suspicious youth” remained uncontested, in many other cases the different social and ethnic backgrounds of the operators instigated different emotional involvements and understandings of what exactly was going on. Storytelling, and bantering in particular, play a major role not only in reproducing and enacting but also in redrawing boundaries between different ethnic groups:

A group of youths, probably of Moroccan descent, are messing around, pushing and shoving each other. Operators on two tables are keeping an eye on them, while the supervisor present is not paying explicit attention to these operators and the images on their screens. I find the attention for the youths a bit unnecessary but do not discuss this with the operators.

A little later, some of the youths run off. The operators follow them with their cameras. One of the youths looks angry; otherwise nothing much is happening.

“He’s really angry, ha, ha. What’s he on?” says one of the operators, a native Dutchman. His neighbor, of Antillean descent, says, his voice full of sarcasm: “What’s he going to do?” “He’s going to shoot, ha, ha,” the first operator replies. The second operator switches to another camera. “Ha, ha. No, mate, Moroccans don’t shoot. The Antilleans do, and the Surinamese too, but the Moroccans don’t. If they do something,” he grins, “they stab.” They continue studying their screens. After another minute, they both switch to another screen, leaving the youths alone. (Field observation February 22, 2013)

Humor can be a way to “constitute a convivial sociality even in the process of acknowledging the potentially negative outcome of social interactions premised on hierarchy, status and race-ethnicity” (Reid 2013: 12). In the diverse setting of the Rotterdam control room, it is possible to make jokes amongst and about each other. While the operators deliberated on the need to watch a group of youngsters, differences in ethnic background were loosely addressed. In many cases, humor was also used to contest forms of “othering”: “A report comes in that a two-year-old white boy is missing, or at least his parents have lost sight of him. One of the operators—a young man of Antillean descent who’s been making jokes all day and repeatedly contradicting the supervisor—laughs, then says: ‘Stolen by a Moroccan, no doubt’” (Field observation November 29, 2012).

Moroccan immigrants form one of the largest ethnic minority groups in the Netherlands. Dutch-Moroccan youngsters are often associated with negative events, such as crime and social problems, in media and popular discourses (Meeussen et al. 2013). Irony and sarcasm provide ways to address and contest remarks by colleagues about serious issues without the responsibility that comes with an utterance in a serious frame. The message underlying the joke will probably be clear, but both speaker and listeners cannot be held fully responsible for what has been said and understood (Goffman 1974: 515). Talk and humor stimulated a convivial sociality between people from different backgrounds and hierarchies and this contributed to a better work environment and a more nuanced understanding of the images watched. However, humor seems to work as a double-edged sword (Rogerson-Revell 2007), being about solidarity and inclusion on one hand and about exclusion on the other hand. Attempts to create a “we” feeling in the control room can also come at the cost of the “them” outside, strengthening “othering” practices. In the example recounted below, a supervisor stepped down from the platform and walked up to the operators, signaling that she is “one of them.” While the operators and supervisor formed tighter relations, this came at the expense of those being watched:

A group of youngsters are hanging out in one of the main squares (Stadhuisplein), drinking whiskey and flirting. Most seem to be of African descent, and the boys are dressed in hip-hop clothing and low baggy jeans. Patrick studies his screen and says to me and his colleague next to him: “That kid’s wearing his jeans real low—right down to under his bum, ha, ha.” His colleague looks at the screen: “... he thought, that’s easy, I’ll already take my trousers off as far as I can, ha, ha!” His colleague laughs. I smile too, finding it both funny and disrespectful. The operators who are watching the square and its surroundings continue to make jokes. One of the supervisors walks over to our side of the room and watches with them. She says: “I know that low-slung trousers are in fashion, but *that* low?!” The operators say: “Yeah, that’s just what we were saying.” The supervisor adds: “I can see his skid marks.” They laugh loudly. (Field observation June 15, 2013)

This exchange entrenches an “us” versus “them” mentality; by employing ridicule, the supervisor and operators distanced themselves from the clothing and behavior of the people they watch. The strengthening of “othering” processes through talk and humor is most notable with respect to differences in gender and sexuality. It seems that, in the control room, the established norms and values of a macho workplace culture are reproduced rather than redrawn by humor and other expressions. Numerous studies have reported on

and critiqued the masculine ethos of police workplace cultures (e.g., Loftus 2010; Schuck and Rabe-Hemp 2019).

This ethos is mainly based on a strong sense of purpose and a crime fighter identity, coupled with celebrating action and violence through storytelling (Loftus 2010). Stories play an important role in constructing and maintaining occupational identity and esteem, especially in the absence of action and excitement (Waddington 1999). While feminine values have become more important for many police teams and women increasingly occupy higher positions within the police (Rabe-Hemp 2008), gender exclusion practices are still widely reported within police and other masculine workplace cultures (Franklin 2007; Schuck 2014). Such expressions of masculinity and exclusive practices also take place within the CCTV control room. This is exemplified by the following excerpt, in which one of the supervisors tells the operators to watch out for a presumed prostitute:

Supervisor Klaas says to the operators: “Woman soliciting under a lamppost... yep, otherwise no-one would see her.” This is followed by a series of jokes. “Of easy virtues, now, but virtues will become harder when you rub them, ha, ha.” Klaas has the biggest mouth.

One of the operators reports that someone is already at it, outside a fishmongers. This is followed by jokes about fishmongers and the suspect: “Learning to suck, ha, ha.” The men make jokes, and supervisor Irene joins in. She comments that the woman doesn’t look very attractive and therefore no-one will go with her. (Field observation November 29, 2012)

This type of scenario highlights sexist practices, which remain largely uncontested in the workplace. While it is important to note that there is no singular masculinity (Connell and Messerschmidt 2005), the control room resembles many police workplaces in which the hegemonic masculinity involves identification with a role as a crime fighter who is unemotional and independent. The absence of “real action”—i.e., not being physically present on the streets and making arrests—might even strengthen these performances (Loftus 2010). In adapting to this workplace culture, operators and supervisors have to do “emotion work” (Hochschild 1979: 561–563): attempts to change or hide their feelings to fit to socially defined rules about how they should feel in a certain situation. In particular, the female operators, a minority within each operator team, must negotiate between the roles associated with their gender and their work (Rabe-Hemp 2008) and might take on a more masculine style of humor and talk (Tannen 1994). While such feeling rules are usually latent and informal, and do not prescribe action itself, they do, as with any other type of rule, prescribe what is allowed or appropriate and what is not in a certain situation (Goffman 1961). Macho attitudes and “contestive” humor (Holmes 2006) can be emotion management strategies, but they do not provide much room for people to show alternative emotions or cope with them in other ways, as several interviewees, both men and women, indicated. Moreover, these feeling rules also influence framing rules, i.e., how people ascribe meaning to situations and vice versa (Hochschild 1979; Goffman 1974). As such, the operators’ emotion work, in combination with the crime fighter image that they try to live up to, might also have consequences for operators’ evaluations of “deviant” behavior and the actions that should be taken.

## Conclusions

This research shows how CCTV surveillance is embedded within, brought about by, and generative of social practices. Interpreting the images watched, and distinguishing suspicion from non-suspicion, involves a constant negotiation of a collective set of practices and reasoning in the control room. On one hand, the control room in Rotterdam enforces discipline and control from the top; there is a clear hierarchy both in terms of social organization and physical layout. Moreover, a protocol structures which actions are classified as either minor or serious incidents, and the supervisors count the frequency of reported incidents per operator. On the other hand, hierarchy and rules are continuously the subject of negotiation in daily work practices and actions. Operators and supervisors made sense of “what it is that’s going on” through interaction. Control is not unidirectional or uncontested, neither between manager and worker (Stanton and

Stam 2003) nor between watcher and those being watched (Smith 2007; Walby 2005). The operators' gaze was pluralistic, individual operators partially made up their own rules and were influenced by the social context in which they resided. Their gaze involved many emotions, including the fear of others and the stress of relating to people on the street and inventing stories about them. Humor plays an important role here: first, to overcome hierarchy, and, second, to collectively manage emotions. Through talk and humor, operators in the Rotterdam control room re-performed what happened on the streets and framed unfolding situations and the people watched. This is a collective process in which the use of humor reflects and re-establishes the workplace culture while, at the same time, it creates opportunities to do things differently (see also Kuipers 2008).

The collective practices and utterances of CCTV operators on busy nights out in the city center of Rotterdam both reflected and challenged stereotypes and the marginalization of groups of people. We have tried to accentuate the socially shared nature of selective targeting (Norris and Armstrong 1999; Coleman 2019) and racialized profiling (Walby 2005). Socially shared practices in the control room involved subtle forms of collective "othering" and discrimination in which affect played a vital role. In the ethnically and socially diverse Rotterdam control room, making sense of a situation happened collectively through talk and humor. Different emotional involvements and perspectives—for example, between operators of Dutch and non-Dutch ethnic origin—led to different individually held understandings and framings of actions. Through keying, or adding a non-serious layer to these frames, these individually held understandings were put in dialogue with contrasting versions of reality. This did not necessarily lead to consensus or agreement, but was a way of subverting or contesting what others had said or seemed to think. Interestingly, while a humorous key did sometimes challenge "othering" on the basis of race or ethnicity, it did not seem to challenge "othering" based on gender or sexuality. While operators and supervisors acknowledged that it was a non-serious frame, the talk about and attitude towards women and non-heterosexual men was not opposed by other humorous utterances. This might be explained by the small number of women working in, and the masculine workplace culture suffusing (Loftus 2010), the control room.

This study underscores the importance of diversity in CCTV control rooms and of overcoming hierarchy in both physical and social design. It shows the importance of affect and of collectively dealing with emotions in the control room in addition to following protocols. In addition, this paper demonstrates the importance, and builds upon the notion of, surveillance as a cultural practice (Monahan 2011). In diverse settings, discussing and even laughing about what happens on the streets in order to understand and evaluate incidents might reduce the processes of marginalization or exclusion associated with CCTV for two reasons. First, through talk and humor, operators redraw boundaries between "us" and "them," and this might mitigate the exclusionary practices of individual operators. Second, by not only following protocols but also discussing when and how to divert from them, operators develop more nuanced understandings of what happens on the streets and might base their categorizations less on stereotypes.

In their review paper, Galič, Timan, and Koops (2017) distinguish three phases in surveillance studies. In the first two phases, surveillance is conceptualized through comprehensive theoretical frameworks. In the third phase, these frameworks are refined in the context of the datafication of society. This refining takes place by analyzing new situations and contexts, such as self-surveillance through social media, but also calls for a further conceptualization of "physical and local surveillance realities that work next to, or in conjunction with, digitised and computerised networks" (Galič, Timan, and Koops 2017: 29). By exploring predictive policing in such a local surveillance reality—the Rotterdam control room—we are able to show how prejudices and political framing are "brought into" data systems. At the same time, we show that social sorting is challenged by humor and diversity in the control room. This re-evaluation by human mediation is missing in fully digitized and computerized networks. Our study contributes to the current debate about networked surveillance based on algorithms by providing a nuanced conceptualization of how social sorting is created but also challenged by human mediation in camera surveillance. To understand the role of surveillance in our increasingly digital societies, it is important to further investigate daily work practices and collective meaning-making in socio-technical assemblages and how these relate to data systems and datafication. The work of Goffman on daily interactions and performances (1967, 1974) and the underlife



of organizations (1961) can be used as a complement to ideas about the structure of surveillance organizations, as situated social practices are what build up, sustain, or challenge order.

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