

DIFFICULTIES IN REVITALIZING PUBLIC SPACE BY CCTV STREET PROSTITUTION SURVEILLANCE IN THE SWISS CITY OF OLTEN

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Abstract

This article critically assesses the adequacy of CCTV as an instrument to revitalize urban areas suffering from concentrated social disadvantage. Empirically, it focuses on the video-surveillance of street prostitution in the Swiss city of Olten. This CCTV system was installed at the beginning of 2001 and focuses on an urban 'hot spot' used by different types of marginalized social groups. In the Olten case-study, video-surveillance is examined as it is understood and perceived both by the population at large and by daily users of the monitored area. In investigating whether surveillance cameras render monitored

areas accessible to people erstwhile excluded from that space because of their negative subjective perception of risks, this article puts particular emphasis on the phenomenon of 'distanciation' caused by CCTV. By showing that CCTV is forgotten very quickly and felt to be somehow unreal against the background of everyday social activities in monitored areas, this approach also stresses that CCTV is very limited as an instrument to revitalize public places of fear.

KEY WORDS ★ CCTV ★ city ★ distanciation ★ public space ★ social control

CCTV. In recent years, these four letters have become a common feature of the urban environment, standing for the omnipresence of surveillance cameras in public places within city centres. While the spectacular increase in video-surveillance has its geographical origin in Britain – where, in 2004, more than 4m cameras were estimated to be in operation (Frith, 2004: 1) – Middle European cities have also, during the past decade, spent millions of Euros to install CCTV systems in order to create safe, accessible and pleasant urban environments. This trend is particularly pushed by rapid technological progress, which enables not only the growing assemblage of various semi-coordinated, heterogeneous forms and functions of surveillance (Haggerty and Ericson, 2000), but also the rise in software sorted automation of 'intelligent' monitoring techniques, capable of identifying pre-programmed 'risk-behaviours' or previously identified 'risk-persons' (Graham, 2005).

Drawing on wider debates about 'urban regeneration' and 'urban renaissance' discussed in this issue, this article critically questions the belief

that surveillance cameras simply 'pave the way to a better future' (Videotronic AG, 2003) by revitalizing urban problem areas. Based on the example of the Swiss city of Olten, where CCTV was employed between 2001 and 2004 to monitor the largest street prostitution area in Switzerland, this article critically assesses the potential and limitations of CCTV for the regeneration of urban areas which are suffering from concentrated social disadvantage.

In local police communiqués, the Olten CCTV project to monitor street prostitution activities was explicitly linked with issues of urban regeneration in at least three different ways (Stadtrat Olten, 2000). First, CCTV was presented as an attempt to secure prostitution activities on the street itself, following the murder of a prostitute some months before the cameras' installation. Second, CCTV was legitimized as an attempt to regenerate the economic appeal of the street prostitution area more generally, by improving its accessibility for people who felt excluded beforehand, due to fears over safety. Third, video-surveillance of street prostitution in Olten was not only meant to revitalize the street prostitution

area itself, but also to improve the image of the city of Olten as a whole by reducing its negative headlines in local, regional and national press. In this, street prostitution surveillance was not only meant to regenerate one specific problem area but to improve the economic appeal of the whole city.

These links between the employment of CCTV and broader strategies of urban regeneration are at the core of my article. In order to critically assess the potential and limits of CCTV to effectively reduce crime, to improve public feelings of safety and thus to revitalize social and commercial activities within particular urban problem areas, I focus my attention primarily on everyday experiences and perceptions of CCTV, both by the Olten population at large and by daily users of the prostitution area.

Based on the general understanding of CCTV as a mediated form of social control, which stands in stark contrast to traditional face-to-face encounters in public space, I argue that CCTV both spatially and mentally disconnects the watched (monitored individuals) from the watchers (operators). CCTV essentially deals with territorial separation, resulting in two distinct categories of space and in two distinct groups of people: while, on the one hand, the world spread *below* the cameras embraces fully exposed publicly accessible places, the world *behind* the cameras consists of access-restricted places, destined for the visualization, manipulation, interpretation and recording of decontextualized CCTV images. This article seeks more powerful insights into how this spatial dichotomy between 'control spaces' and 'controlled spaces' is lived and perceived by concerned users of monitored areas. Drawing on rich empirical insights, I argue that the delegation of control to hidden, spatially separated CCTV operators results in a general misunderstanding about the world behind the cameras and in a mental distance to security agents which limits the efficiency of CCTV as an instrument to sustainably revitalize 'places of fear'. This process strongly distanciates the regulation of public space, such is my main assumption, and thus indeed counteracts current trends towards an increased incorporation and activation of the local civil society into more participatory forms and community-led strategies to induce an urban renaissance (Holden and Iveson, 2003; Johnstone and Whitehead, 2004).

Questioning CCTV

My attempt to critically assess the euphoria pertaining to the promises of CCTV as a tool of urban revitalization draws upon an increasingly sophisticated body of theoretical and empirical research, which suggests that the relationship between CCTV and the development of crime and feelings of safety in monitored areas are much more subtle, complex and contingent than the often generalized and deterministic discourses of 'CCTV-advocates' suggest (e.g. Brown, 1995; Fyfe and Bannister, 1996; Ditton and Short, 1998; Tilley, 1998; Honess and Charman, 1992). Referring to this highly revealing literature, at least four major limitations of CCTV can be drawn, which together form the starting point of my analysis.

First, while the installation of surveillance cameras often results in a short-term reduction of crime rates, longer follow-up periods show that the cameras' long-term effects in deterring crime have to be interpreted more critically (Armitage, 2002; Welsh and Farrington, 2002; Gill and Spriggs, 2005). Unfortunately, as many authors suggest, the after-time periods in evaluating the effectiveness of CCTV are often too short (Fyfe and Bannister, 1996). This raises a series of questions about how surveillance cameras are experienced and perceived by those under control. It is from exactly such a standpoint that this article seeks more powerful insights in the functioning of CCTV. Based on the long-term empirical study of street prostitution surveillance in the Swiss city of Olten, my analysis engages with CCTV becoming a taken-for-granted feature which is mostly ignored in everyday urban life both by potential criminals and by the population at large.

Second, a growing range of CCTV analysts suggest that the effects of surveillance cameras are not only limited in time but also in space. However, it is unfortunate that most CCTV evaluations are not taking into account the side effects of CCTV on adjoining, unmonitored areas. They neither measure the diffusion of CCTV benefits nor the displacement of crime to unmonitored places (Skinns, 1998; Tilley, 1998). Yet personal, interview-based research on CCTV at Geneva International Airport and within public transport in Geneva strongly validates the assertion that CCTV cannot reduce crime globally but rather follows the aim to

guarantee the well-functioning of separated, hierarchically organized parts of the urban environment. The risk of displacing crime to other spaces is hardly ever taken into account by CCTV operations (Ruegg et al., 2006). Regarding petty criminality at airports and railway stations, for example, one interviewed police CCTV operator at Geneva International Airport underlined that:

... thieves move from airport to airport, from railway station to railway station. They go to all densely populated public places, all over Europe. If we drive them away from our airport, they will certainly be found elsewhere.

Third, a growing range of CCTV evaluations suggests that the efficiency of CCTV strongly depends on which type of crime is being analysed. For example, while CCTV is generally found to be effective in reducing vehicle crime in car parks, empirical research suggests that CCTV has little or no effect on vandalism and acts of aggression on public transport systems and city-centre settings (e.g. Brown 1995; Welsh and Farrington, 2002; Gill and Spriggs, 2005). Following from this, a wide range of authors argue that CCTV is more likely to reduce crime which is based on rational cost-benefit calculations ('premeditated crime') than 'impulsive crime' (e.g. alcohol-related offences).

Fourth, the functioning and impacts of CCTV-systems also depend on a variety of system-inherent factors, reaching from collaborations between operators to technical dimensions of the cameras. Following Gill and Spriggs (2005: xii), 'the type of camera used and the way that it [surveillance] was mounted influenced whether a system was useful for live monitoring, for providing good quality retrospective evidence, for deterring would-be offenders, for reassuring the public, or for a combination of these'. Given the complexity of factors influencing the outcomes of CCTV, Welsh and Farrington conclude that 'exactly what the optimal circumstances are for effective use of CCTV schemes is not entirely clear at present' (2002: 45). On a theoretical level, following the proposals of Akrich and Méadel (1999), CCTV must thus be considered as a dynamic socio-technical construction which is constantly 'in the making' (Latour, 1987). CCTV systems are the subject of constant research and development, and require,

during the whole process of bringing them into service, a whole series of micro-decisions and micro-negotiations between numerous individuals. If one considers that a sociotechnical system such as video-surveillance is both the product and the producer of social, political, economical and spatial processes, the whole question about CCTV efficiency also impels the analysis and comparison of different methods of implementation, development and daily use of CCTV systems across a given sociospatial context (Ruegg et al., 2004). Given these four limitations of CCTV, there is a pressing need to move beyond generalized and deterministic discourses about CCTV to look into richer empirical details of how CCTV really works and how cameras are perceived by monitored individuals in different contexts, so as to better understand the complex outcomes of CCTV.

Street prostitution surveillance in Olten

While video-surveillance has sparked a remarkable and revealing literature over the years, an increasingly diverse range of work also draws attention to the still important shortcomings of many CCTV evaluations. For example, despite the growing body of empirical work about the efficiency of surveillance cameras, very few academics have provided critical accounts of the everyday, micro-scale implications of CCTV on the experiences of the city by monitored individuals. This article directly addresses this issue. On an empirical basis, my approach both examines the perceptions and experiences of CCTV by the population at large and by daily users of one monitored area, using the example of street prostitution surveillance in the Swiss city of Olten. While Olten is relatively small in scale (about 17,000 inhabitants) it is located in the centre of Switzerland at the hub of the North-South and East-West road and railway routes. This central location constitutes an important factor in explaining the huge scene of street prostitution in the city. In Olten, as elsewhere in Switzerland, street prostitution is legally allowed within specifically assigned urban areas (in Olten, the street called 'Industriestrasse') so long as prostitutes are officially registered and possess a valid work permit. However, while this research in

Olten was conducted between 2001 and 2004, one year later, the street prostitution area on the Industriestrasse was closed down, through the prohibition of car traffic at night on the street. The cameras, however, still remain in 2006.

The installation of street prostitution CCTV at the beginning of 2001 caused a lot of national and international media interest. Although two pedestrian subways within the same city as well as the railway station have been video-monitored by the police for several years, German, French and Swiss television teams appeared in large numbers to report on the new CCTV system. This media attention was mainly motivated by the exceptional character of the Industriestrasse, considered to be the biggest centre of street prostitution in Switzerland with up to 50 prostitutes soliciting a night (women and transvestites).

In addition to its significance for national and international media representatives, the Olten CCTV project also resulted in considerable police interest both from other Swiss cantons and from other European countries. Without being conceived as such originally, the Olten initiative to monitor street prostitution activities thus became a quite closely followed test site both nationally and internationally.

I often get the impression that through CCTV, Olten has somehow become a show city. Many people have come here, interested in learning more about our CCTV project. Whenever I attend police conferences, I am constantly asked about how our project went on, how we were legally dealing with CCTV etc. (Head of Police Department, Olten)

Compared to open street CCTV in British cities, however, street prostitution surveillance in Olten was very small in scale, as it only comprised three dome cameras along the 1.2 km long street. The images of these cameras were transferred by a public network of optical fibres laid underground to the municipal police headquarters 2 km away to be monitored and recorded. Still, the special circumstances of the project made the Olten CCTV system a unique case, which provides a powerful example of the potential and limitations of CCTV to regenerate and revitalize urban problem areas. In fact, the Olten street prostitution surveillance was not only among the first police open-street CCTV initiatives in Switzerland, the system was also

described as the first police initiative to systematically monitor street prostitution in Europe (Affolter and Wyss, 2002). While CCTV has often been used in deprived areas before, especially in British and American cities, it has never been systematically planned and explicitly justified to monitor street prostitution activities. Although systematic evaluation studies of CCTV in the context of street prostitution have therefore not been realized, other studies have been indirectly touching upon the connections between prostitution, CCTV and security issues. In this, the CCTV evaluation by the 'California Research Bureau' – covering 11 American cities, where CCTV was used to fight drug trafficking, gang violence and prostitution-related crime (Nieto, 1997) – constitutes an interesting example. Furthermore, Mork Lomell's study of CCTV in Oslo (2004) also reflects on surveillance cameras within an urban area with prostitution activities. Otherwise, in Switzerland as elsewhere, linkages between prostitution and security issues are either studied in terms of personal risks for prostitutes themselves (Guggenbühl and Berger, 2001), or in terms of processes of urban degeneration and popular feelings of safety more generally (Güngör, 2002).

Importantly, the Olten case-study also draws upon investigations which focus on social feelings and discourses associated with (street) prostitution more generally. These studies provide important insights into the stigmatization of prostitution areas as 'zones of shame and danger' (Ashworth et al., 1988; Hubbard, 1997 cited in Koskela, 1999: 5), which also fully applied in the Olten case. Interviews with politicians, police agents and also the population at large (via an opinion survey) revealed the Industriestrasse to be viewed largely as an urban 'hot spot' and linked to different types of marginalized social groups (drug addicts, alcoholics, prostitutes and criminals). Furthermore, if we trace back to the cameras' installation in 2001, we find a range of alarmist discourses on street prostitution. As I have mentioned before, CCTV was both intended to revitalize the prostitution area – as one specific problem area – and to improve the economic and tourist appeal of the whole city (Stadtrat Olten, 2000).

However, there is much more to the Industriestrasse than street prostitution. Situated within an industrial area of the city near the railway station, the Industriestrasse forms a complex

microcosm, bringing together various types of social groups. Besides street prostitution, some alternative cultural institutions (e.g. a music club and a theatre), residents, several big industrial complexes and various small enterprises also border the street. The Olten case-study thus provides an interesting illustration of the 'struggles for space' between different social players and interests linked to the use of surveillance cameras.

Methodology

Within the Olten case-study, two distinct methodological approaches were applied. As this research was conducted up to three years after the cameras' installation (between 2001 and 2004), they both focus on the perception of long-term consequences of CCTV, which – as I have argued – are rarely studied in evaluation studies. Both these methodological approaches were essentially dealing with discourses on video-surveillance, designed as two complementary and deeply interwoven angles on the question of how street prostitution surveillance was experienced and perceived both by the population at large and by daily users of the monitored street. It is on this basis that the potential of CCTV to revitalize urban problem areas is studied in the following.

On the one hand, in order to investigate how camera effects were perceived by the population at large, I take into account selected results from a public opinion survey I conducted in 2003. Within this public opinion poll, 1,500 Olten residents were contacted by letter, attaching a questionnaire. For this purpose, individuals were arbitrarily chosen from 5,621 total residential addresses in Olten, based on their age. Unfortunately, the original address data base did not contain a gender dimension. Thus, within the 476 responses (reply rate 31.9%), the gender balance varies considerably (62% men, 38% women), while the age structure is relatively well spread. Within the statistical analysis of the collected data, three age categories were established (20–36 years of age: 153 respondents; 37–53 years of age: 159 respondents; 54–70 years of age: 164 respondents). Divided into three major parts, the Olten survey was designed to: (a) study respondents' everyday socio-spatial practices within the city as a whole; (b) address the perception of CCTV on a very general level;

(c) examine experiences and perceptions of the street prostitution CCTV project more particularly. This article is informed by selected results from the survey's third part, whereby I am especially focusing on respondents' evaluations of several predefined statements within the questionnaire about the effects of monitoring street prostitution activities by CCTV.

On the other hand, in order to examine how the Olten CCTV project was lived and experienced from 2001–04, my article draws upon 13 in-depth interviews with different types of street users (prostitutes, social workers, residents, concertgoers in a music-club on the street, representatives from cultural institutions and representatives from industrial companies). Providing the foundation for a comprehensive analysis of everyday individual experiences of CCTV, these interviews were openly conducted, seeking deep insights in individual ways of dealing with CCTV. Furthermore, in order to study the perception of CCTV by prostitutes' clients, CCTV-relevant messages within a publicly accessible internet forum about street prostitution across Europe were analysed. However, this particular methodological approach is not really developed in this article.

Both these empirical approaches deal not only with the acceptability and perceived effectiveness of CCTV (for crime prevention and detection). They were also designed to provide empirically based insights into the cameras' effects on people's perceptions and use of the street prostitution area:

- Do people believe in CCTV as an appropriate instrument to regenerate urban problem areas, e.g. through its positive effects in reducing social risks and revitalizing (social and/or commercial) activities in monitored areas?
- Are people perceiving and using monitored areas differently because of video-surveillance? (e.g. Are people more likely to walk in monitored areas?)

Perceived usefulness of CCTV

While public acceptance of CCTV is generally high (Ditton, 1998; Ditton and Short, 1998; Helten and Fischer, 2004), several factors simultaneously tend to

strongly differentiate public perceptions of CCTV. Thus, the simple belief that CCTV has a high level of public support must be critically questioned. First, social acceptability of video-surveillance depends on the type and nature of monitored places. In general, people are more likely to accept CCTV in 'functional places' such as car parks and pedestrian subways than in residential areas and public squares (Vitalis, 1998; Hölscher, 2003). Second, public opinion differs with regards to private or public surveillance of public space. While public support for police surveillance is generally high, private cameras are regarded more critically by the public. In the Olten survey, for example, 47.6 percent of the participants preferred private institutions to avoid monitoring public space, while only 26.8 percent fully accepted the proliferation of private cameras focused on public ground. Third, while most people agreed that 'if you do not have anything to hide, you should not be afraid of CCTV', they often did not actively ask for more cameras. Again, the Olten opinion survey usefully illustrates this issue, given that four times as many participants prefer human control agents to CCTV. Asked about ways to secure public space, improved street lighting was mentioned as much as CCTV (Klauser, 2006).

In sum, public acceptance of video-surveillance strongly depends on whether people can imagine any direct personal benefits from the cameras or not (Klauser, 2004). On the basis of this general picture about the social acceptability of CCTV, I now look in more detail at the perceived usefulness of street prostitution surveillance in Olten. This analysis is situated on three levels:

- CCTV to reduce street prostitution activities and to prevent prostitution-related crimes (*before* any incident)
- CCTV to facilitate real-time police interventions (*during* any incident)
- CCTV to detect crime (*after* any incident).

CCTV to prevent negative side effects of street prostitution

Regarding the use of CCTV to prevent negative side effects of street prostitution, in-depth interviews

with users of the Industriestrasse powerfully report a significant drop in the number of both prostitutes and their clients during the first few months after the cameras' installation. Many prostitutes were even described as having used 'tactical ruses' in the sense of Michel de Certeau (1984), in order to avoid camera-monitored areas on the street. These micro-resistances to the cameras were mainly connected to privacy concerns from prostitutes who tried to adapt to the new circumstances on the Industriestrasse. They provide a powerful example of how strongly the installation of CCTV can influence uses and perceptions of monitored areas. However, the situation three years after the cameras' installation was described as being much like it was beforehand. On the basis of 'eyewitness reports' by interviewed street users, the long-term efficiency of CCTV must be considered to be very limited. This critical finding about the potential of CCTV to enduringly revitalize urban problem areas is largely confirmed by other CCTV evaluations, based on long-term crime statistics (Welsh and Farrington, 2002). As one prostitute cited:

At the beginning, the cameras' effects were obvious. Many women walked down the street in a manner that they thought would allow them to remain outside of the cameras' field of vision. Nowadays, everybody's walking through the street, as if one would go for a normal walk.

Comments from interviewed street users also reflect the predominant view of most participants of the Olten opinion survey. Only 4.5 percent of all respondents believed that CCTV had resulted in a general, long-term drop of street prostitution in Olten, while 24 percent rejected this idea. Some 65 percent did not know how to evaluate this question. Above all, this result puts emphasis on the missing public knowledge regarding the general consequences of street prostitution surveillance. Furthermore, it is interesting to note that most participants of the opinion survey did not feel that the cameras on the Industriestrasse resulted in any displacement of street prostitution in Olten. While 10 percent of all respondents agreed with this idea, 32 percent rejected it. The remaining majority of all respondents (57%) simply did not think that – or know if – CCTV introduced any changes on street prostitution in Olten at all.

CCTV for real-time police interventions

Real-time police interventions because of CCTV were perceived very unlikely to happen both by interviewed street users and by the population at large. In this regard, most interviewed street users had come to the conclusion that the 'spatial distance' between the monitored street and the CCTV control room was too large to allow for real-time interventions by police forces. CCTV, as a (spatially) distanced surveillance device, was felt to lead to some kind of parallel world, strictly disconnected from monitored areas.

Interestingly, interviewed prostitutes and female concertgoers in a music club on the Industriestrasse were more critical about the cameras' effectiveness for real-time police interventions than interviewed men. This finding concurs with Koskela's conclusions about CCTV experiences by women in Helsinki and Edinburgh (Koskela, 1999: 7). Koskela stresses that women's risk perception in public space strongly differs from men's perception of risks:

In the case of an attack it might be possible to use the videotape to catch the offender(s), and use it as evidence in court, but this would never erase the actual experience of violence. In relation to sexual violence especially this is a serious disadvantage. Prevention of sexual assault is of much more value than any reaction after the violence has taken place. Women clearly indicate this as a crucial reason for mistrust towards video surveillance. (Koskela, 1999: 7)

In the Olten case-study, Koskela's conclusion found powerful expression in the evaluation of CCTV by one female concertgoer at the Industriestrasse:

Knowing that there are these cameras, does this really help me? Until the police finally arrive, I will already have been raped for a long time. Really, I do not think much of CCTV. Better security? That's a big question for me.

Again, these interview-based insights into the perception of CCTV concur with results from the public opinion survey. Only 4.5 percent of all respondents did actually believe in the possibility of real-time interventions because of CCTV. While 35 percent rejected this possibility, 60.5 percent were found to be indifferent or not to know how to answer this question.

CCTV for crime detection

While interviewed people hardly believed in the efficiency of CCTV to enable real-time police interventions, 45 percent of all participants of the Olten public opinion poll were convinced that CCTV on the Industriestrasse did help to detect crime. Only 3.5 percent disagreed with this statement. Overall, CCTV was considered most effective for crime detection, a finding which is largely confirmed by other research (Ditton, 2000: 692). However, while the population at large generally found CCTV of street prostitution to be useful in its repressive dimension, interviews with daily street-users regarding the positive image of the cameras tended to be more differentiated.

Among all interviewed street-users, nobody really related the usefulness of CCTV in detecting crime to themselves. On the one hand, interviewed persons without any connections to street prostitution were exclusively relating CCTV benefits to prostitutes. This missing self-relatedness to CCTV was strongly influenced by the street-users' perceived detachment from the camera initiators. In fact, people were largely disappointed and felt excluded both from the installation processes and from daily uses of the cameras. This perceived neglect mainly resulted in the effectiveness of the cameras being heavily questioned. This was further aggravated by the lack of clearly communicated camera success (in preventing or detecting crime):

Politicians are not really interested in this street. Otherwise, one could have done something together with local companies. We rather think that these cameras help prostitutes. They might improve their security. Generally, residents and local enterprises have never been taken into consideration. Anyway, I've never had this impression. (Caretaker, food industry)

On the other hand, interviewed prostitutes and social workers exclusively associated the cameras' usefulness with residents and commercial enterprises on the street. In fact, neither the prostitutes nor the social workers on the street (providing aid and counsel to the prostitutes) had been contacted before the installation of the cameras. This missing element of participation within the projects was still felt during the interviews. It strongly contributed to the fact that

CCTV has never been appropriated by this user category of the street either.

Sometimes there were several burglaries a week. The cameras were installed because of the industrial buildings. For us women it would have been better to extend the presence of the Lysistrada-bus [social workers] than to install cameras. That's very clear. I really think that these cameras are for the industrial buildings' security and for residents. I even think that they did co-finance the system. Everybody here thinks like that. I don't believe in the cameras. I only believe in common sense. (Prostitute)

Several other factors further contributed to the lack of meaning of CCTV for prostitutes. First, concern was expressed that the cameras did not really fit the needs of the prostitutes. While social control between women on the streetwalking area itself was described to be generally high and well organized, risks for prostitutes mainly occurred at nearby situated, secluded places where they used to go with clients. Second, cameras were described as increasing the prostitutes' marginality and vulnerability, especially of drug-addicted prostitutes and of prostitutes without valid work permits. In fact, while CCTV was not felt as having generally reduced street prostitution or improved security on the street, specific categories of prostitutes were reported as having moved to other, more remote localities, where they would not find any assistance from social workers. The cameras' deterrent effects were thus felt to especially weaken the most vulnerable women on the street. In this light, consideration must also be given to the implications of CCTV in terms of spatial exclusion of marginalized social groups and individuals (Reeve, 1998; Williams and Johnstone, 2000; Coleman, 2004). Third, cameras were heavily criticized because of the police's failure in efficiently using the system. The prostitutes' acceptance of CCTV was especially undermined after being told by the police – following an attack which occurred beneath one of the cameras – that camera images had not been saved, due to some long-term technical problems of the system.

Revitalization of social and commercial activities in monitored areas?

The potential of CCTV to revitalize social and commercial activities in monitored areas crucially

depends on whether it is effectively perceived as an efficient security device by potential street-users. In this sense, the perceived usefulness of street prostitution surveillance, which has been discussed so far, provides a first series of insights into the question of whether CCTV did help to regenerate the monitored prostitution area. This question is examined further below, where, drawing on the Olten public opinion poll, I first discuss the perception of CCTV's effects on the street's social and commercial activities and second, I consider more detailed insights from interviews with daily street users.

Increased uses of the Industriestrasse by Olten residents?

Within the public opinion poll, the proportion of respondents who voiced negative and positive answers to the question of whether the Industriestrasse became safer for pedestrians because of CCTV was evenly balanced: 22 percent of the respondents agreed with the statement; 18 percent rejected it. While elderly people were most likely to believe that CCTV had increased the security of pedestrians on the street, we find again that women were generally more critical than men. However, the percentage difference between men and women in this regard was not very strong. While 23 percent of all men accepted the above statement, 19 percent of all women did the same.

Nevertheless, the fact that 22 percent of the respondents of the Olten survey indicated that CCTV had made the Industriestrasse safer for pedestrians does not automatically mean that these people also intended to use the street more often. Only 13 percent stated that they would use the street more frequently, while 61 percent rejected this possibility. Among those who affirmed increased street use, 89 percent also thought that CCTV had improved the street's safety.

First, this result strongly underlines the need to clearly communicate the cameras' usefulness in order to increase the popular belief in the system, a critical condition for urban regeneration, which might consist in revitalized social and commercial activities in monitored areas. Second, we see that, for a small minority, CCTV indeed made the Industriestrasse more accessible, thus pointing

towards the (limited but existent) potential of CCTV as an instrument to revitalize places of fear. However, among those who would increase their use of the Industriestrasse, older people and women were far more sceptical (only 8% of all women and 9% of respondents between 54 and 70 years of age). The fact that both social groups with the most marked negative feelings of safety were also the least likely to increase their use of the street emphasizes the strong limitations of CCTV as an instrument to revitalize urban problem areas. As such, CCTV did not help as much to reappropriate the Industriestrasse for people who felt most excluded beforehand as it did for people whose subjective perception of the Industriestrasse was already not too bad.

Street users' mental distance from the cameras

In previous sections of this article, we have seen that interviewed street users were generally more critical about the cameras than the Olten residents. While the attitude of Olten residents towards the cameras can be qualified as hopefully optimistic, although without much knowledge about the real effects of the system, street users were largely disappointed and disillusioned about the cameras. They questioned CCTV not only because of their frustration about the lack of collaboration before and during the project, but also because of their disappointment at the cameras' long-term effects, following the observed resumption of street prostitution activities some months after the camera installation. Following on from this, it is not surprising that interviewed street users did not really associate CCTV with real changes in terms of social or commercial activities on the street.

Regarding personal experiences of the cameras by street users, CCTV was often perceived to be somehow unreal and far away from everyday life, without really belonging to the street. In most interviews, CCTV was described as a technical device which was felt to be not only at a 'spatial' but also at a 'mental distance'. This general feeling about the cameras was expressed by all the different types of social players on the street, from inhabitants to representatives of big industrial buildings and cultural institutions (theatre, music club) to prostitutes and concertgoers.

Before the cameras were installed, I thought that this really will be very bizarre. Then, suddenly, the cameras were installed and I didn't even acknowledge them. It's strange, the cameras do not really seem to belong to the street. Somehow, the cameras, they're nothing. (Concertgoer, Industriestrasse)

A closer examination of the interviews shows that the feelings expressed about the cameras being somehow 'unreal' were strongly conditioned by the missing possibility of directly questioning and challenging the watchers. In fact, interviewed individuals felt like pure objects of information rather than as subjects of communication. Therefore, despite the big, fluorescent colour placards announcing the presence of CCTV on the Olten Industriestrasse, the silent and to most eyes invisible cameras were quickly forgotten.

Not a single person thinks about the cameras anymore ... It has become like everyday life. And as I said, you don't know how it is monitored. (Concertgoer at the music club on the Industriestrasse)

The foregoing quote underlines the effect of visual surveillance technologies in dissociating security agents from concerned citizens, by delegating the regulation of public space to detached and mostly invisible control spaces. In particular, it appears that the mediated control of public space by CCTV fundamentally misses a 'human element of proximity', for building trust and for reminding people about them being assisted and taken into account in daily security operations. In this respect, CCTV fundamentally differs from mutual forms of social control that take place as a result of the concurrent face-to-face presence and surveillance of those occupying the same space at the same time. The spatial dichotomy between 'control spaces' and 'controlled spaces' was strongly felt and criticized by interviewed users of the Industriestrasse.

In this light, the Olten case-study also points towards the assertion that the mental distance between the watched and the watchers also contributes to explaining why people so quickly lose concerns about privacy which could be linked to the current trivialization of CCTV. Interviewed street users did not 'feel anything' in this connection, as I was told several times. Just as they did not really care about the cameras' benefits, they did not establish any links between the cameras and their own behaviour or privacy either. People were not worried about the problematic of CCTV in

terms of social discrimination and exclusion either, which has been powerfully expressed by other recent work on CCTV (Norris and Armstrong, 1999; Norris, 2002; Lyon, 2003).

I do not have any concerns about privacy, linked to this street. If I think about it and if I imagine CCTV in other Swiss cities I would certainly say: Oh that's bad, everybody is monitored now, no liberty, extremely bad. But I can't feel this here. It is actually very strange. (Concertgoer at the music club on the Industriestrasse)

Conclusion

This article has engaged with the possibilities and limitations of CCTV as an instrument to revitalize urban areas suffering from concentrated social disadvantage. In this respect, the study of street-prostitution surveillance in the Swiss city of Olten provided deep empirically based insights into long-term perceptions and experiences of CCTV both by the population at large and by directly concerned users of monitored areas. Above all, this approach permitted elucidation of the strongly differentiated public perceptions of CCTV, varying between feelings of hopeful consent, deception and ignorance.

Among the participants of the Olten public opinion survey, there was no general unquestioning assumption that CCTV really did help to regenerate the economic and social appeal of the Industriestrasse. While people hardly believed in CCTV as an instrument for crime prevention or for real-time police interventions, they were inclined to believe that CCTV was helping to detect crime. In sum, only 13 percent of the survey participants thought of increasing their use of the Industriestrasse, thus pointing towards the existent but very limited potential of CCTV as an instrument to revitalize places of fear.

Interestingly, interviewed street users were generally more sceptical about the cameras than other Olten residents. This result was mainly influenced by their personally experienced lack of any camera impacts. They generally did agree that after a few initial months of spectacular decrease in the street's problems, the symbolic (preventive) power of the cameras was lost. According to these 'eyewitness reports', the original, political aim to revitalize the street prostitution area through CCTV has not been attained.

Interview data also point out that neither prostitutes nor other street users have ever successfully 'appropriated' CCTV as their own. The aim and usefulness of the cameras – politically formulated in terms of crime prevention and urban regeneration – remained either unknown or unclear. Interviewed street users strongly expressed their feelings of having been excluded both from the installation processes and from daily uses of the cameras. Thus, three years after the cameras' installation, CCTV did not mean anything for them anymore.

Following on from this, the last part of this article argued that video-surveillance both spatially and mentally 'distanciates' the regulation of public space, resulting in a strongly felt spatial dichotomy between the watchers and the watched. Certainly, more transparent communication between security agents and street users could have helped to reduce the detachment between the two worlds, below and behind the cameras. One of the principal challenges that must be overcome for successfully revitalizing public space by CCTV would thus be to counteract the distancing effects by CCTV through the employment of a series of accompanying measures. Also, the strongly expressed critical objections to the Olten CCTV project by street users should above all serve as a clear warning not to substitute human security agents with non-human technologies. This seems especially important if video-surveillance deals with marginalized social groups, as was the case in connection with the street prostitution area.

In another way, recent strategies in the employment of CCTV by British police in London neighbourhoods also seem to address the distancing effects of CCTV, by enabling local residents to watch real-time CCTV images on home TVs (Allen, 2006). Independently of the important privacy issues which are obviously linked with this 'entertainment through CCTV' initiative, it remains unclear, however, whether this measure really enables the creation of a more permanent and active role of residents for crime prevention and urban regeneration issues.

While on the one hand there is certainly much scope for improving the use of CCTV, the Olten case-study on the other hand also points towards a more general conflict, which is at the heart of contemporary security policies, based on the ever increased, mediated control of public space by surveillance technology: CCTV indeed stands in stark contrast to current forms and strategies of 'proximity policing' or of 'governing at a distance'

(Garland, 1996), which above all aim to generate a more active and responsible role of citizens for issues of urban renaissance and crime control. In direct opposition to this type of political agenda, the perceptions and emotions invoked by CCTV in the Olten case strongly underline that the mediation of social control by CCTV tends to exacerbate and polarize the opposition between policymakers/security agents and street users. The strongly felt, spatial and mental distance to the world behind the cameras indeed strongly underlines the risk, associated with CCTV, of undermining responsabilizing strategies which aim to make security a 'part of the routine day to day practice and culture of all agencies and individuals' (Home Office, 1993: 16).

In this, another example of CCTV in Switzerland may be of interest. In 2003, following several years of political debates, police forces in Zurich were officially given the option to employ CCTV in an area of the city which was widely known for its drug and prostitution problems. However, the deployment of CCTV in Zurich being a political issue but not a police request, police forces openly refused to use CCTV, pleading that the installation of surveillance cameras would be in clear contradiction of and conflict with strategies for proximity policing which have been carefully set up over years (Gyr, 2003: 41). Pointing at the unclear legal basis for CCTV in Zurich and arguing that cameras would not only undermine trust in police activities in this highly sensitive urban area, but also reduce the presence of police officers in the neighbourhood itself, there are still no police cameras to be found in this area today.

Besides this instance, however, although CCTV has not been generalized in public places in Switzerland as in the UK for example, police departments of many Swiss cities have openly announced their interest in video-surveillance, including Bern, Biel, Lausanne, Geneva, Lucerne, St Gall and Basel (Klauser, 2006). The trivialization of visual surveillance within city centres thus seems to have arrived in Switzerland as well. Regarding this further extension of CCTV, there is thus a desperate need to move beyond the often generalized and deterministic discourses about the role of surveillance to pave the way for a better future, and to publicly debate the ways in which CCTV is really being used, the often far less significant effects of the cameras and the social costs of current developments towards the ever increased surveillance of public and private life.

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