On the Threshold to Urban Panopticon? Analysing the Employment of CCTV in European Cities and Assessing its Social and Political Impacts



RTD-Project (September 2001 – February 2004) 5th Framework Programme of the European Commission Contract No.: HPSE-CT2001-00094

info@urbaneye.net www.urbaneye.net

Working Paper No. 13

What do people think about CCTV? Findings from a Berlin survey

Frank Helten & Bernd Fischer

f.helten@bis-berlin.de

Berlin Institute for Social Research Ansbacher Straße 5, 10787 Berlin, Germany

February 2004

Project Co-ordination:

Centre for Technology and Society Technical University Berlin www.ztg.tu-berlin.de



Table of contents

1	INTR	ODUCTION	2
2	THE	QUANTITATIVE SURVEY	6
	2.1	SAMPLE DESCRIPTION	6
	2.2	PERCEPTION AND AWARENESS OF CCTV IN THE CITY	9
	2.3	BELIEF DIMENSIONS ABOUT THE POTENTIAL OF CCTV	15
	2.4	FEELING COMFORTABLE WITH CCTV:	
		Modes of operation, operators, rules and regulations	20
	2.5	PATTERNS OF RECOGNITION OF (DEVIANT) BEHAVIOUR	25
	2.6	DIMENSIONS OF FEEL AND BEHAVE	29
	2.7	DISCUSSION OF OUTCOMES	30
3	THE	QUALITATIVE STUDY: SOCIAL EFFECTS OF CCTV	33
	3.1	SAMPLE DESCRIPTION	33
	3.2	EXPERIENCING THE CITY AND EVERYDAY BEHAVIOUR	33
	3.3	EXPERIENCING CONSCIOUSLY OF BEING WATCHED	35
	3.4	PERCEPTION AND KNOWLEDGE OF CCTV IN THE CITY	37
	3.5	REGULATION OF BEHAVIOUR WHEN BEING WATCHED BY CCTV	41
	3.6	OPINIONS ON CCTV	46
4	ARF	THERE SOCIAL FEFECTS OF CCTV?	50

1 Introduction

This report resumes the outcomes of two empirical studies within the scope of the URBANEYE project. Both studies are targeting the individual urban dweller who experiences new modes of control technologies to be found within the everyday urban space of the post-modern European city. According to prior research outcomes focusing on the legal regulations of deployment of CCTV, on the micro-mapping of CCTV in urban space and on in depth and on site studies in Berlin Shopping malls, addressing the use of CCTV by operators, the following two studies are characterised by a change in perspective: In the middle of both is neither the legal framework nor the observed and mapped infrastructure of CCTV as observed in Berlin streets and places. This time we are going to understand the other side of the medal. This means that we look at the individual perceptions, feeling and guesses, normal citizens express when asked about CCTV. To this end a total of 203 interviews with shopping mall visitors were conducted on site, that is, outside of shopping malls.

Each interview – based on a standardized questionnaire- with some open question, lasted between 15 to 30 minutes. After the interview, the respondents were asked about their willingness to participate into a further in depth interview (qualitative study). Eventually a total of 14 persons agreed and have been contacted afterwards. It turned out that some of them finally refused and so we had to recruit some more people. We started with the first part of the study – the quantitative research - in June and finished in the middle of July. In depth interviews (qualitative study) were conducted in late summer and in September and a total of 10 interviews were achieved.

The structure of this report refers first to the outcomes of the quantitative study by presenting the findings and by giving some further explanations. We will then turn to the qualitative study by presenting an overall evaluation of the outcomes. Finally we will discuss the findings of both studies and draw some conclusions in terms of the underlying research dimensions and hypotheses.

The background for both studies refers to prior research efforts which have been undertaken within the URBANEYE project. We will swiftly summarize some of the hereto related findings with respect to the situation of CCTV in Germany and Berlin.

Legal background and regulations

According to German laws and regulations it can be stated that the employment of CCTV is strictly regulated when applied in public space. Efficient laws on data protection on the one hand and a quite controversial public discussion concerning the usefulness of CCTV have until today ensured that there are only a couple of open-street CCTV systems being installed all over Germany. The penetration rate of CCTV within public space is quite low however slightly growing.

However this impression completely changes if we look at the speed of diffusion, the usage and application of CCTV in private or public buildings or within private places. Here we can state a widespread use of CCTV, e.g., in and outside of federal buildings and embassies, in and nearby stations, airports, subway platforms, in- and outside shops and shopping malls, in some sport centres and post offices and even in universities (cancelled). What is more, there have been some so called pilots, to introduce CCTV to survey the queues inside of a social service building in a declining urban area. All these applications are subject of divergent regulations which can not be discussed here in detail. However what they have in common is the fact that their operational use is strictly regulated. This means that the data protection laws have to be respected, that the storage of data is restrained, and that the security staff of private companies is not allowed to fully play the role of the executive. However the security staff is allowed to dismiss persons who do not behave corresponding to the house-rules which set the frame for an so called appropriate behaviour within the precincts of privately owned space.

Spatial dimensions - geography of surveillance

The micro-mapping of the CCTV -surveillance infrastructure demonstrates a widespread use of CCTV which clearly refers to different types of CCTV clusters. Following the functional segmentation of the city in terms of business and shopping districts, governmental and residential areas and transport sites, we clearly can first distinguish a business and shopping cluster: Office buildings and shops within the area of most frequented high-streets are increasingly making use of CCTV. That said it appears that within both part of the city (East and West) and especially within newly built or refurbished office buildings and shops, CCTV is being installed. As shown elsewhere, the urban renewal and modernisation process has been especially accelerated in Berlin East. This is the reason why CCTV activities in this and some other segments are even more frequent than in Berlin West and that CCTV can be characterised as an accompanying measure of post-modernisation.

A second – governmental – CCTV cluster can be identified with respect to the employment of CCTV in and outside the buildings of the Federal and the Berlin government and their administrations which are adding up to a considerable CCTV infrastructure. The local place of this area is mainly Berlin Mitte including parts of Berlin West and Berlin East as well as the so-called representations of the Länder (federal countries) and the settlements of a number of embassies within this area. To these places with a high density of CCTV, the video-surveilled institutions/ and places of the Jewish community (mainly concentrated in the adjacent Berlin-East-Scheunenviertel) have to be added. This cluster partly overlaps with the first one.

A third cluster can be seen in the CCTV system-configurations in use within the urban transportation system and the railway stations (platforms, and publicly accessible space). Some of these stations have been transformed within the last decade into a merger

between transportation, entertainment and shopping opportunities which partly have a CCTV system on their own. Moreover it has to be noted that the urban transport companies have started to equip the "running material" – buses and subway trains – with video-cameras to show to the driver what is going on in the passenger room. Thus a new type of mobile/stationary (liquid) CCTV configuration emerges.

Finally we can identify a couple of sites where CCTV is being deployed within residential areas. We hesitate to denominate these sites as forming a cluster because they are distributed all over the city. However some of these are very near to the overlapping cluster of embassies and governmental areas.

Especially interesting is the fact that some of these clusters are coupled with those of the transport sites. Berlin has a dense and cohesive network of public transportation facilities (subway, urban express rail, buses and tram) which are increasingly equipped with surveillance technologies. It can be shown that the CCTV cluster of the business and shopping sector interpenetrates the one of the transport sector. Thus an additional and spatially extended (hyper)cluster stretches along the lines of the urban transportation system. It has to be emphasized that the emergence of these clusters is due to the underlying process of urban development and planning. Especially with regard to the development of shopping malls the impact of the master plan is evident, prescribing that new shopping malls within the city of Berlin should only be allowed if an excellent access by urban mass transport would be possible.

Characteristics of CCTV-configurations in Shopping Malls

As pointed out elsewhere the CCTV configuration of Berlin Shopping Malls (BSM) can be described in terms of the density of video-cameras, the number of the security staff, the division of labour and the scope and the organisation of work. The general idea or the leading principle of CCTV applications in BSM is driven by the idea that the management of the BSM does not want that their customers are too much aware of the fact that CCTV is in operation. When exploring the CCTV-configurations in BSM, we always stated that clear indications of CCTV where missing that the display of house rules was not very visible and that the security staff seemed to play a role of being not so much visible. It was getting evident that the management of the BSM intended to hide away or to make CCTV less visible to the normal customer. Furthermore some of the BSM had outdoor CCTV to control the entry and the exit of the mall. These cameras also covered part of the open street – especially when the used camera type was a powerful dome-camera being able to observe the adjacent urban space. The legal justification of such arrangements is still unclear. However until any legal decision has been taken, it seems that the BSM management is not inclined not to use these cameras.

Our quantitative survey has been conducted in front of the entrance of six different shopping malls all being equipped with outdoor and indoor CCTV. All of the shopping

malls were located within non-critical urban spaces either in the centre of the city or in still stable suburbs.

Research questions

The questions that will be addressed in the following are dealing with the individual mode of perceptions, opinions and attitudes of people concerning the pattern of how CCTV is being used inside and outside of shopping malls and to which extent CCTV affects individual behaviour. The topics addressed are:

- Place: Familiarity with the site where CCTV is being installed
- Potential: Opinions on the awareness, perception, diffusion, potential, usefulness, benefits and risks of CCTV
- Efficiency: Opinions on security staff
- Order: Opinions on rules and regulations of CCTV
- Practices: Guesses about the practices of social sorting / classification of the control staff
- Individual impacts/ coping: Opinions on the impact of CCTV on one's own behaviour.

Thus the quantitative study is mainly concerned with the effort to explore what people do know about CCTV and how they feel about the impacts CCTV may have on their own behaviour.

The qualitative study addresses similar issues concerning the social effects of CCTV in a more detailed perspective. However the intentions are different as this part of the study will allow for more in depth-insights on how people experience CCTV in relation to their everyday life. Two main issues will be addressed: first attitudes and general knowledge towards CCTV like awareness of cameras and assumed purposes, values of cameras, and reflections on legitimacy of cameras as well as on the individual construction of privacy; and second, experience and effects of CCTV with a special focus on individual feelings of being surveilled or even tracked and on regulation and on coping strategies like avoiding or fooling cameras, staging in front of cameras, displacements and awareness but ignorance. Thus the qualitative study will enable us to look with some more detailed information of how the urban citizen thinks about CCTV and how and in which ways it will affect his behaviour. Because of the fact that Berlin East and its residents have experienced a long-lasting period of extensive and maximum surveillance until 1989 it is of special interest if we still can find any major differences in the thinking about CCTV.

2 The quantitative survey

2.1 Sample description

Field work started on June 11, 2003 and ended on July 24, 2003. During this time a total of 203 interviews have been conducted.

Gender

The ratio of male/female respondents was 49.8 to 50.2%

Gender	n	%
Female	102	50.2
Male	101	49.8
Total	203	100.0

Age & education

The distribution of age groups showed the following pattern:

Age group	n	%
15-19	15	7.4
20-39	69	34
40-59	69	34
60+	50	24.6
Total	203	100.0

Split up by education we have two major groups of people. Those who completed middle school: 82 persons or 40.4% and those who have a higher education: 80 persons or 39.4%. A third group has completed secondary school (16.7%), whereas people with primary or some classes in the middle school account for 6 persons or just 3.0%. Only one of all interviewed did not complete school. All in all the persons interviewed show quite an elevated degree of education which is fairly higher than the average of the Berlin population. Around 7.4% of the interviewed persons identified themselves as apparently belonging to a minority.

Education	n	%
in primary or middle school	6	3.0
completed middle school	82	40.4
completed secondary school	34	16.7
higher education	80	39.4
no completed school	1	0.5
Total	203	100.0

Time

The interviews were conducted according to three different time strata. During 9:00 am and 2:00 pm we interviewed a total of 72 persons or 35.5 %, during 2:00 pm to 7:00 pm we had 103 or nearly 51.0% and during 7:00 pm and 10:00 pm we interviewed 28 persons, 13.8% of all. This is due mainly to the difficulty to accomplish the sample of the elderly who were hard to find in the evening hours.

Time	n	%
9:00 to 14:00	72	35.5
14:00 to 19:00	103	51.0
19:00 to 22:00	28	13.8
Total	203	100.0

Places

Field work took place outside six different shopping malls in East and West Berlin, whereas the majority of all interviews where conducted close to only one East Berlin Shopping Mall. Making a difference between East and West Berlin the distribution shows a majority for the East (58.6%) whereas the West stands for 41.4 % of all respondents.

Places	n	%
Berlin West	84	41.4
Berlin East	119	58.6
Total	203	100.0

The interviews in Berlin East and Berlin West were conducted in front of six different shopping malls. In Berlin East we gathered at one shopping mall 119 interviews. In the western part of the City data were collected at five different sites. Overall we have the following distribution of interview cases:

Site	n	%
Ring-Center (East)	119	58.6
Kranzler-Eck (Ku'Damm)	25	12.3
Potsdamer Platz	21	10.3
Gropius-Passagen	15	7.4
Forum Neu-Kölln	14	6.9
Gesundbrunnen-Center	9	4.4
Total	203	100.0

Familiarity with the site

The respondents showed a considerable degree of familiarity with the site. Nearly 60.0% are living or working nearby or pass frequently through. Occasionally around 37.0% have visited the place before and a smaller portion of 4.4% has been there for the first time.

Familiarity	n	%
Passing daily or frequently	119	59.0
Occasionally	75	37.0
First time	8	4.0
Total	203	100.0

If we look with some more detail to the degree of familiarity at different sites some additional results can be produced. The following table shows the distribution of familiarity with all the sites where interviews have been conducted. We have defined familiarity in terms of visiting daily or passing frequently and created the following degrees of familiarity (are visiting daily / passing frequently):

Degree of familiarity with site

 Very high:
 80 - 100%

 High:
 60 - 79%

 Medium:
 40 - 59%

 Low:
 20 - 39%

 Very low:
 0 - 19%.

Site	n	%	Familiarity with site	
Gropius-Passagen	15	7.4	very high	80%
Forum Neu-Kölln	14	6.9	high	72%
Ring-Center	119	58.6	high	66%
Potsdamer Platz	21	10.3	medium	43%
Kranzler-Eck (Ku'Damm)	25	12.3	low	28%
Gesundbrunnen-Center	9	4.4	low	22%
Total	203	100.0		

It appears that those shopping malls which serve the daily demands show very high or high degrees of familiarity. These shopping malls are at the edge of the inner city center or supply suburban areas. Shopping malls which are within the city center show different and quite low degrees of familiarity. They address different demands of consumption or can be seen as highly frequented by tourists.

However due to the restrained numbers of interviews for each shopping mall in the western part of the city these results can only point to the fact that places matter and that there may be an interrelation between the degree of familiarity with the shopping mall site in terms of the structure of goods offered and purposes of visits etc.

2.2 Perception and awareness of CCTV in the City

Knowing about video surveillance inside and outside Berlin shopping malls

According to our research interests concerning the problem whether urban dwellers know about the places of video surveillance the following questions were addressed:

(2) Do you think this area where we are standing is under video surveillance?

Site under surveillance?	n	%
Yes	123	60.6
No	69	34.0
Don´t know	8	3.9
Missing	3	1.5
Total	203	100.0

(3) If yes: Can you point out about where the nearest camera	is?
--	-----

Nearest Camera	n	%
Yes, nearest camera	17	8.4
No, but other camera nearby	13	6.4
Not correctly identified	7	3.4
No, not able to point out	91	44.8
Missing	75	36.9
Total	203	100.0

These results clearly demonstrate that more than sixty percent of all believe that the site is under surveillance. However, only a tiny minority knows about the placement of cameras. To know a little bit more whether or not there is an interrelation concerning the familiarity with sites, the belief and the knowing of where the cameras are, we created the following table. To do this we produced the following indicator of awareness of cameras:

Awareness of cameras

(able to point to the next or nearest camera):

Very low: 0 - 10% Low: 11 - 20% Medium: 21 - 30%

Thus we can create the following table addressing the distribution of sites with regards to the dimensions: familiarity, belief of surveillance and awareness of cameras:

Familiarity, belief and knowledge of CCTV:

Site	n	%	Familiarity with site	Believe surveillance	Knows the camera/ Awareness
Gropius-Passagen	15	7.4	very high	high	low (13%)
Forum Neu-Kölln	14	6.9	high	medium	very low (0%)
Ring-Center	119	58.6	high	high	low (15%)
Potsdamer Platz	21	10.3	medium	very high	medium (24%)
Kranzler-Eck	25	12.3	low	medium	low (16%)
Gesundbrunnen-Center	9	4.4	low	low	very low (10%)
Total	203	100.0			

It appears that even though the familiarity with the site is quite high that this can not be taken as an indicator of knowing more about cameras. On the contrary there are some reasons to maintain the assumption that awareness of cameras and surveillance are more dependent on other dimensions which have not been addressed in our questionnaire—such as purpose of the visit (everyday courses, tourist etc). Interesting however, the place

which only has a medium degree of familiarity, shows high scores concerning whether the site is under surveillance and awareness of cameras. This place is being highly visited by tourists. To draw a very preliminary conclusion we suggest that the normal urban dweller doing his courses in a shopping mall is not much concerned by finding out about cameras. Maybe she or he has not the time, is in a hurry – corresponding to the type of urbanite man described by Georg Simmel. However those who intend not only to shop but also to look around and to explore are more likely to know about cameras. They can be characterized as having something in common with the urban flaneur as described by Baudelaire/ E.A. Poe/ Walter Benjamin.

If we look at the socio-demographic data of those who know about the camera we have to emphasize that mainly younger people are experts on the location of cameras.

Perception and awareness of video-surveillance in Berlin and elsewhere

Today, video-cameras are appearing everywhere and quite a lot of information on CCTV has been reported in the media in the last few months. With regard to the findings of question three we wanted to know about the perception and awareness of CCTV in urban and other spaces. Thus we addressed the question:

(4) Where else have you personally seen surveillance cameras in this city? [note first spontaneous answer, then prompt].

The next table clearly shows that the knowledge on where the cameras are being placed is not so much widespread between the interviewees. Thus the results which were presented in the previous section are supported. Only a minority seems to refer more to the type of personality who is interested in exploring his environment when being outside home.

4: Have personally seen cameras at the	following	locations:
--	-----------	------------

Locations (N=203)	n	%
L. Public spaces. Jewish institutions	75	37.0
C. Subway platform	71	35.0
F. Bank counters	32	15.8
K. Shopping mall walkways	27	13.3
A. High street shops	25	12.3
M. Others (museums. gas stations)	16	7.0
N. Transport cars. parking	13	6.4
G. In High street. outdoors	5	2.5
O. Outside entrances to homes	3	1.5
P. Embassy	3	1.5
Q. Minibanks	3	1.5
R. Pubs. bars and discos	1	0.5
E. Fitting rooms	1	0.5
H. Hospital wards	1	0.5
Multiple answers (= 273)		

Knowledge on location of CCTV refers obviously to the activities of everyday-life where some time is available to look around (when being on subway platforms etc) or is gained by the discourse taking place in the mass-media. Generally spoken we can assume that the interviewees express:

- We know that there are cameras ... but we do not exactly know where: As already said before: The vast majority of the interviewees had no idea where the cameras were positioned. However interesting: around two third of our interviewees were convinced that the places where the interviews took place where under video-surveillance. This may be a hint that the widespread use and application of video-cameras are already firmly integrated into the knowledge of the urban dwellers. They know about the city and on how to interact with the urban environment and with people. They assume that there are cameras and that certain sites are under surveillance. But they seem not to be interested to exactly know where the cameras are.
- Between astonishment and indifference: 79 persons (40%) did show a reaction when they were told about the position of the cameras. These reactions have been recoded to 6 categories: Amusement, astonishment, indifference, annoyance, agreement and others. Setting the 79 answers to 100% the results show that the most frequent reaction is astonishment (36 persons / 46%) whereas the indifference reaction is shown by 11 people or 14%. Only 9 persons (11.4%) agree and another 6 respectively seven are either annoyed or amused about the fact of being under surveillance.

- Perception of CCTV: Mainly in publicly accessible places: To go further in the perception / awareness context we asked about the perception of video-cameras at different sites in the city. What people really know about video-cameras may be mirrored by their spontaneous reaction to the question at which sites they already have consciously seen video-cameras as shown above. What is more interesting, it appears that the publicly accessible spaces and buildings like places, open streets, town-halls, and ministries score highest. Another peak is given by video-cameras placement at transport sites etc. To make those sites more visible in terms of perception issues we rearrange the coding in the following:
 - Open or covered publicly accessible space (G, K, L)
 - o Transport sites (B, C, I)
 - o More privately accessible space (A, F, H)
 - o Intimate space: (D, E, J)

Places of Perception of CCTV	n	%
Publicly accessible space	129	47
Transport space	82	30
Privately accessible space	60	22
Intimate space	1	0
Total	272	100

So we retain that most of the perception of CCTV is due to sites which are publicly accessible.

Next to this is we have to point to the transport site where quite a lot of video-cameras are being remarked – mainly on subway platforms, at train stations and at parking decks.

However in more privately accessible or even intimate space CCTV is less often existent and less often mentioned. It seems reasonable to conclude that this is due to the fact that the more private the space is, the less frequented and perceived it is.

Furthermore it appears that CCTV inside toilets, changing rooms etc. is rather an exception and not widespread. So it turns out that the perception of the people interviewed so far, fairly mirrors the actual state of visibility of CCTV: if the cameras appear frequently, and this is mainly the case in publicly accessible space, they are perceived by quite a number of persons and vice versa.

Going back to questions 2 it is interesting that people make reasonable and justified assumptions whether sites are surveilled. But they rarely really know where the cameras are situated. This is a form of belief about video cameras which already demonstrates how much we are used to their existence. We make reasonable guesses about the places where they are quite likely to be found. However we do not find it worth while to really

know where they are. (This points to a potential outcome of the whole discussion and information on CCTV – that is to a certain degree: disciplination.).

Question 4b: We have a list of 12 types of locations where video surveillance is sometimes installed. Do you think that having CCTV cameras in such places is a good or a bad thing?

N=203	Good		Ne	utral	В	ad	Don't know	
	n	%	n	%	n	%	n	%
F. At bank counter	174	85.7	11	5.4	17	8.4	1	0.5
C. Subway/railway platforms	173	85.2	10	4.9	19	9.4	1	0.5
A. High street shops	139	68.5	17	8.4	46	22.7	1	0.5
K. "Streets" of shopping mall	124	61.1	17	8.4	60	29.6	1	0.5
H. In hospital wards	112	55.2	31	15.3	59	29.1	1	0.5
I. Along motorways	108	53.2	29	14.3	65	32.0	1	0.5
B. Taxi passenger seats	105	51.7	30	14.8	67	33.0	1	0.5
G. Open high street	98	48.3	29	14.3	75	36.9	1	0.5
L. Entrance to residential bldg	58	28.6	27	13.3	116	57.1	1	0.5
J. At sinks in public toilets	33	16.3	19	9.4	149	73.4	1	0.5
D. Sports centre changing room	24	11.8	17	8.4	160	78.8	2	1.0
E. Clothing store dressing room	21	10.3	12	5.9	169	83.3	1	0.5

With regard to attitudes of interviewed people towards the employment of CCTV in various sites, question 4b also tackled the problem, how much people liked or disliked CCTV in those places. Even though there are quite differences concerning the appreciation or dislike of CCTV in those places, it is getting clear that male and female respondents are mainly expressing a similar concern. As an overall pattern we can figure out that there is a clear negative attitude in terms of how close to your own space CCTV is admitted. The term space here includes two notions: space which is near to ones own living place and space that is near to your body when doing "intimate" activities – like changing clothes. In cases where the privately owned zone of the body is affected, answers are negative. However there are exceptions. Positive answers are given with regard to CCTV at bank counters and inside taxis both of them being quite close to you. On the other hand people do not object so much on CCTV in high-streets, in shops or shopping malls or at train/ subway stations. If we look for additional explications, we can draw a distinction between the acceptance of CCTV in places where a considerable risk is being assumed or where privacy plays a major role (as table 4b demonstrates).

 Places where it is a good thing to have cameras are places which have a strong and evident relation to risk (robbery, traffic, health, speed, accidents)

- Places where it is difficult to decide whether or not CCTV is good or bad, are places which have at the same time private and public functions like motorways (private travelling on public space), taxis (private driver for public user), open high-street (individuals walking in public space), residential buildings and where it is difficult to make a clear decision for private or public concerns
- Places where it is a bad thing to have cameras are places which have a clear relation to private space, privacy and intimacy such us entrances to residential buildings, changing and dressing rooms and opportunities for body care.
- It is interesting to see that people judge about CCTV where they have never ever seen CCTV

Thus it turns out that the interviewees are quite clear about the usefulness of CCTV: The more an affinity to obvious risks can be stated the more likely is the acceptance of CCTV. On the other hand there is a clear front against more or less "voyeuristic" approaches.

2.3 Belief dimensions about the potential of CCTV

These following questions of our questionnaire (No 5 and 6) do not target at a realistic assessment of the technological state of the art of CCTV equipment and operation. It is a question about what people believe cameras can perform.

Belief gap: What technology can and can't do

Given the fact that surveillance technology, researched so far in our own observational studies in Berlin shopping malls, appears to be rather a quite rudimentary technology as for its everyday usage, average citizens assess the existing technology as quite powerful:

Question 5: If you had to make a guess, how many of the video surveillance cameras in this city would you say ...

Percentage distribution of valid responses to questions 5 (A-F) (N=203).

How many of the CCTV cameras in this city do you think	all	most	some	none	Don't know
D. Can take close-up pictures of people's faces?	14.3	38.4	36.9	4.9	5.4
A. Are being recorded on tape or computer disk?	10.3	53.2	28.1	3.0	4.4
B. Are being watched by someone at a monitor as they record?	5.9	36.5	54.2	1.0	3.4
E. Can automatically recognize individuals or licenses plates?	4.9	34.5	51.2	4.9	4.4
C. Are hidden so that no one knows they're being watched?	3.4	53.7	38.9	1.5	2.5
F. Can pick up conversation as well as pictures?	2.5	33.5	50.2	6.9	6.4

More than one third believe that all or most of the cameras can record sound, around two third believe that the data are stored and another 42% guess that cameras are

constantly monitored. More than the half of all respondents (53%) think that CCTV is being employed to make close-up pictures and around 40% believe that they are able to recognise individuals or car number plates. Even more interesting is the result that around 58% guess that the cameras are hidden. So it turns out that the public opinion on CCTV differs considerably with a more realistic assessment of CCTV and demonstrates a neat reality gap. E.g. individual face recognition is far from being realistic however plate recognition is a fact – not in Berlin but in London (and at the beginning of 2004 there is some discussion on this topic in Berlin).

Approximately redistributed (mainly agreeing answers, all and most), the items of question 5 are getting more explicit:

How many of the CCTV cameras in this city do you think	All or most	some	none	Don't know
A. Are being recorded on tape or computer disk?	63.5	28.1	3.0	4.4
C. Are hidden so that no one knows they're being watched?	57.1	38.9	1.5	2.5
D. Can take close-up pictures of people's faces?	52.7	36.9	4.9	5.4
B. Are being watched by someone at a monitor as they record?	42.4	54.2	1.0	3.4
E. Can automatically recognize individuals or licenses plates?	39.4	51.2	4.9	4.4
F. Can pick up conversation as well as pictures?	36.0	50.2	6.9	6.4

Overall we can state that even if there is a considerable belief gap in what technology can and can't do, we have to admit that the understanding of the potential of CCTV is quite appropriate. That leads us to conclude that our interviewees express a twofold opinion with regard to the power of technology: CCTV is being recognized as a powerful control or surveillance technology but the real efficiency of CCTV in everyday practice is not well known and therefore overestimated. However one should not neglect the outcome of this everyday knowledge in terms of regulation of urban behaviour. More eyes – even if they are fakes- are apparently resented as anonymous control-devices which may create the willingness of the urbanite to behave in a more docile way.

Commonly shared beliefs on CCTV

Next we can try to find out about how people judge about CCTV keeping in mind the above mentioned belief about the potential of CCTV and its influence on urban behaviour.

Question 6: I have a list of some statements we've encountered in our research. I'd like to know whether you tend to agree or disagree with each statement.

Frequency and percentage distribution of valid responses to question 6

Statements (N=203)	Ag	ree	Disa	agree Neutral			Total		
	n	%	n	%	n	%			
1. People who obey the law have nothing to fear from video surveillance	142	70.0	50	24.6	11	5.4	203	100.0	
2. It would be OK to use hidden cameras in surveillance of public spaces	76	37.4	84	41.4	43	21.2	203	100.0	
3. Video surveillance invades people's privacy	100	49.3	76	37.4	27	13.3	203	100.0	
4. I would welcome CCTV cameras on the street where I live	58	28.6	128	63.1	17	8.4	203	100.0	
5. Displaces rather than reduces	112	55.2	54	26.6	37	18.2	203	100.0	
6. Poor replacement for police	133	65.5	47	23.2	23	11.3	203	100.0	
7. Prevents serious crime	48	23.6	121	59.6	32	15.8	201	99.0	
8. Can be abused	132	65.0	32	15.8	36	17.7	200	98.5	
9. Used to discriminate	79	38.9	98	48.3	24	11.8	201	99.0	
10. Feel safe if more CCTV	59	29.1	121	59.6	22	10.8	202	99.5	

The first item of question 6: People who obey the law have nothing to fear from video surveillance is rather positively answered – 70% agree, 5.5% neutral and 25% disagree. We understand this as a widespread conform/ or even affirmative behaviour of a naive attitude towards CCTV. Naive – because it excludes the potential of further storing, distributing and retrieving data for yet unknown purposes which can produce unintended and maybe very nasty effects.

Next to this item is the one: It would be OK to use hidden cameras in surveillance of public spaces. Around 38% of our respondents agree to this item, neutral are 21% and 42% disagree. We understand the results of this answer as an indication for the still ongoing process of getting clear with the right employment of CCTV. As shown above in question four most of the people believe that there are quite a lot of hidden cameras.

The next item addresses privacy issues: Video surveillance invades people's privacy. Nearly 50% agree, whereas 8.5% are neutral and 37.2 % disagree. This assessment is largely supported with regard to the place where CCTV should be in operation.

Answers to item 4: I would welcome CCTV cameras on the street where I live are clearly demonstrating that people dislike the idea of having CCTV too close to them: 29%

agree; neutral are 5.5% but: nearly two third (63%) reject this statement. As already mentioned above with regard to personal/ intimate space it appears that people are concerned in terms of respect for their privacy and as shown in the item 9 they are quite critical about the safety effects of CCTV.

To item 10: If everywhere was watched by CCTV cameras, I would feel much safer. 29% agree, 11% being neutral but around 60% disagree. This is quite a complete different result in comparison to some studies being conducted in the last few years, announcing as a fact that CCTV is broadly accepted. Corresponding to our findings, things are more differentiated and show a clear option for an appropriate usage of surveillance technologies. Most of the other items which will be explained in the following, point into the same direction. The majority of the respondents agree that CCTV displaces crime (55%) that CCTV is a poor replacement for police (65%), and that CCTV can be abused (65%). They do not think that CCTV can prevent from serious crime (59%). However they hold for the fact that CCTV is not used to discriminate (47% vs. 40%, neutral 12.1%).

All in all we may conclude that the dominant attitude towards the items / statements presented above is a sceptical one: People are not at all convinced about the advantages of CCTV.

We are still uncertain how to assess these results. Given the fact that the belief on the control potential of CCTV technology is estimated as being high in terms of prevention / spy potentials, we can state a far weaker potential in terms of resented benefits. This points to an interesting interpretative figure of technological assessment: Powerful technology is available (in the perceptions of citizens) but useful applications are missing. What is more, it is not clear whether the assessment of the people interviewed so far, would change if they would know about the real and weaker technical and everyday performance / practice of CCTV in- and outside shopping malls. So it seems necessary to go for a more realistic explanation of the potential of CCTV. In other words: it would be helpful to demystify CCTV and to clearly explain the weaknesses and strengths of such systems to the public.

It seems that the first item "People who obey the law have nothing to fear from video surveillance" on which 70% of the interviewees agree deserves some more critical attention. At first sight this broad acceptance of video-surveillance mirrors the usual and widespread argument of conform behaviour. However if we analyse how the positive answers to this item are distributed along the more critical statements of this questions we find a considerable degree of dissent.

To demonstrate this, the following crosstables have been produced. Thus it can be shown that those who say to have nothing to fear because they obey the law have nevertheless some serious objections concerning the impact of CCTV on privacy, the deployment of hidden cameras, the use of CCTV in the street where they live, the abuse

of cameras and the use of cameras to discriminate. Furthermore it appears that a considerable share of this part of the population is not convinced that CCTV will contribute to feel safer in everyday-life. So we may retain that all those who adhere to the overall statement of law-obeying / nothing to fear express a considerable concern with regard to some (unavoidable or unintended) consequences of CCTV.

Invades privacy

Law-obeying nothing to fear	agree		ne	eutral	dis	agree		Fotal
agree	47	33.1%	23	16.2%	72	50.7%	142	100.0%
neutral	7	63.6%	2	18.2%	2	18.2%	11	100.0%
disagree	46	92%	2	4%	2	4%	50	100.0%

OK to use hidden cameras

Law-obeying nothing to fear	agree		agree neutral		disagree		Total	
Agree	72	50.7%	38	26.8%	32	22.5%	142	100.0%
Neutral	1	9.1%	1	9.1%	9	81.8%	11	100.0%
Disagree	3	6.0%	4	8.0%	43	86.0%	50	100.0%

Welcome on my street

Law-obeying nothing to fear	agree		ne	eutral	dis	agree		Total
Agree	56	39.4%	17	12.0%	69	48.6%	142	100.0%
Neutral	1	9.1%			10	90.9%	11	100.0%
Disagree	1	2.0%			49	98.0%	50	100.0%

Can be abused

Law-obeying nothing to fear	agree		ne	eutral	dis	agree	Total		
agree	82	58.6%	29	20.7%	29	20.7%	140	100.0%	
neutral	8	72.7%	3	27.3%			11	100.0%	
disagree	42	85.7%	4	8.2%	3	6.1%	4 9	100.0%	

Can be used to discriminate

Law-obeying nothing to fear	agree		ne	eutral	dis	agree	Total		
agree	40	28.6%	17	12.1%	83	59.3%	140	100.0%	
neutral	6	54.5%	2	18.2%	3	27.3%	11	100.0%	
disagree	33	66.0%	5	10.0%	12	24.0%	50	100.0%	

Feel safer if more CCTV

Law-obeying nothing to fear	agree		neutral		dis	agree	Total		
agree	55	39.0%	22	15.6%	64	45.4%	141	100.0%	
neutral	2	18.2%	-	-	9	81.8%	11	100.0%	
disagree	2	4.0%	-	-	48	96.0%	50	100.0%	

It appears that the statements collected so far express that even those who agree to the item nothing to fear are seriously concerned by some of the impact or practices of how CCTV can be used respectively abused. Most interesting is the fact that the pending invasion of privacy is criticized and that the interviewees think that the technology has the potential for being abused.

2.4 Feeling comfortable with CCTV: Modes of operation, operators, rules and regulations

Modes of operation

The next questions address the problem how the public feels about CCTV in terms of the potential of what the technology and the operators can and should really do. Furthermore the problem of who should watch the monitors is being addressed. Above we already stated a quite sceptical attitude to the assumed or real benefits of CCTV. Now we look on what the interviewees are thinking about the preferable practice of how to do surveillance (question 7).

Question 7: When walking in an area such as this, would you feel most comfortable ...

	n	%
With cameras that are continually watched and taped?	74	37.6
With cameras that are watched but not taped?	48	24.4
With cameras that are taped but not watched?	41	20.8
With "dummy" cameras (neither watched nor taped?)	17	8.6
With no cameras at all?	17	8.6
Total	197	100

The first item of the table above points out that nearly 38% of the interviewed people feel most comfortable if the monitors are watched and that data are recorded and stored. Further 24% feel comfortable when only being watched and not recorded and around 20% prefer that CCTV would only record but not watch. Dummy systems would be preferred by 8.6% and an equal portion would prefer no system at all.

Above (question 4b) we stated quite a broad acceptance of CCTV at different sites associated with risk and less acceptance at sites associated with privacy. So we can say that question 7 stresses the expectancies and guesses of citizens how to use CCTV in an appropriate way with regard to those (applications-sites) configurations which are accepted. The fact that nearly 38% opt for a quite comprehensive practice of CCTV-operation (watch and store) may point to an understanding of CCTV as an enlargement of control functionality. People feel comfortable with CCTV (at sites associated with risk) if they know that control staff is watching and that data are being stored. Overall and with regard to the answers to the next two items of question (7) we must state that people are favourable to CCTV in various modes of operation (altogether 82.8%). Together with the "dummy" camera item more than 90% accept and only a small amount of around 9% would reject the overall statement to feel most comfortable under CCTV surveillance.

To check whether our assumption on control functionality makes some sense we produced the following crosstable with regard to positive answers to question (4b) and answers to question 7 about the mode of surveillance. We assume that those who are inclined to deploy comprehensive solutions like watching and tape recording will be considerably above average values as shown in the answers of question 7. Thus we can learn a little bit more which mode of CCTV operation may be preferred of more positive¹ or more negative types in different contexts.

Quite astonishingly, it turns out that those who are positive about the use of comprehensive CCTV solutions are mostly above average concerning comprehensive solutions for private spaces first and in spaces related to risk.

Positive types are those who answered with "good" to the items of question 4b, negative types answered with "bad".

Crosstables: CCTV positive?*Modes of operation/feeling comfortable

N=203		tched taped	•	d not ched		ched taped	Dui	nmy		h no nera	Tot	al
	n	%	n	%	n	%	n	%	n	%	n	%
Sports centre changing room	16	66.7	4	16.7	4	16.7	-	-	-	-	24	100
Clothing store dressing room	12	60.0	3	15.0	5	25.0	-	-	-	-	20	100
Open high street	54	56.8	21	22.1	18	18.9	1	1.1	1	1.1	95	100
Entrance to residential bldg	29	52.7	12	21.8	13	23.6	1	1.8	-	-	55	100
Along motorways	54	51.4	19	18.1	24	22.9	5	4.8	3	2.9	105	100
High street shops	68	50.0	26	19.1	34	25.0	4	2.9	4	2.9	136	100
"Streets" of shopping mall	61	50.0	29	23.8	26	21.3	2	1.6	4	3.3	122	100
Taxi passenger seats	50	49.5	19	18.8	25	24.8	5	5.0	2	2.0	101	100
In hospital wards	50	46.7	23	21.5	22	20.6	10	9.3	2	1.9	107	100
At sinks in public toilets	15	45.5	8	24.2	10	30.3	-	-	-	-	33	100
Subway/railway platforms	72	43.1	36	21.6	42	25.1	9	5.4	8	4.8	167	100
At bank counter	71	42.3	36	21.4	42	25.0	11	6.5	8	4.8	168	100
Total	552	48.7	236	20.8	265	23.4	48	4.2	32	2.8	1133	100

Looking at those who did give negative answers to question 4b (see next table) we can state that they are on average concerning the privacy areas and that they are below concerning the more risk related applications of public and semi-public spaces.

However and due to the insufficient number of cases for the more privacy related activities we have to be careful with these results. Nevertheless we can at least state that both groups of on the one hand the CCTV positive and the CCTV negative do have a quite different understanding of feeling comfortable with different mode of operations. CCTV positive people prefer in most of the contexts the solution of watching and tape recording whereas the CCTV negative are considerably below the average of watching and tape-recording, on average or slightly below concerning either/or taped/watched.

CCTV negative?*Modes of operation/feeling comfortable

N=203	Watched Taped not and taped watched			Watched D not taped		•		h no nera	Total			
	n	%	n	%	n	%	n	%	n	%	n	%
At sinks in public toilets	53	36.8	27	18.8	31	21.5	16	11.1	17	11.8	144	100.0
Clothing store dressing room	56	34.1	35	21.3	40	24.4	16	9.8	17	10.4	164	100.0
Sports centre changing room	47	30.3	34	21.9	40	25.8	17	11.0	17	11.0	155	100.0
In hospital wards	17	28.8	14	23.7	15	25.4	1	1.7	12	20.3	59	100.0
Entrance to residential bldg	33	28.9	24	21.1	27	23.7	14	12.3	16	14.0	114	100.0
Taxi passenger seats	17	25.4	13	19.4	14	20.9	10	14.9	13	19.4	67	100.0
Along motorways	12	18.5	17	26.2	14	21.5	9	13.8	13	20.0	65	100.0
At bank counter	3	17.6	4	23.5	3	17.6	3	17.6	4	23.5	17	100.0
"Streets" of shopping mall	8	14.0	8	14.0	15	26.3	13	22.8	13	22.8	57	100.0
Open high street	9	12.3	13	17.8	21	28.8	14	19.2	16	21.9	73	100.0
High street shops	3	6.8	11	25.0	8	18.2	10	22.7	12	27.3	44	100.0
Subway/railway platforms	1	5.3	4	21.1	1	5.3	5	26.3	8	42.1	19	100.0
Total	259	26.4	204	20.8	229	23.4	128	13.08	158	16.1	978	100.0

Trust in CCTV operators

The next question addresses the opinion of people on the person in front of the monitor, the CCTV operator, the surveilling person. As we know the term surveillance also includes the notion of being protected and of getting help if necessary. In western societies the surveillance function has been fulfilled by police staff. However, within the last few decades we have witnessed the rise of the privately owned security industry on the one hand and of a movement of so called "neighbourhood watch groups" or other associations of citizens who pretend to take over the tasks of the police-force. In Germany some efforts have been undertaken to create a loosely coupled association between the police, shop-owners, private security guards and other citizens to consult on city-centre development and to take adequate measures if crime rates are rising. Furthermore and since the 1970s private security guards (so called "black sheriffs") have been employed to control underground platforms and shopping malls. So we can assume that there is already some experience/ knowledge on behalf of the interviewees

concerning the items submitted in question 8. The answers given are very clear and there is no doubt that the majority of he interviewees feel most comfortable knowing that the police is watching. Only 27% opt for private security guards. Other solutions are less or not accepted

Question 8: When walking along a street with cameras that are continually monitored, would you feel most comfortable if they are being monitored by:

	n	%
The police	106	53.0
Private security guards?	54	27.0
None of the above. I'd rather they were not watched at all.	18	9.0
police and/or private guards	9	4.5
Other (specify)	6	3.0
Local property owners or their employees?	2	1.0
Volunteer citizens?	2	1.0
all	1	0.5
police and shop owners	1	0.5
private security/ shop owner's /staff	1	0.5
Total N	200	100.0

Rules and regulations

The next question addresses issues on operational/ organizational and legal regulations of CCTV:

Question 9: A number of conditions / regulations have been proposed to control CCTV operations. In your opinion, how important are the following – very, somewhat, or not important?

Level of importance	V	ery	Somewhat		Not		Total	
Regulations	n	%	n	%	n	%	n	%
Restrictions on the disclosure of data to commercial interests.	195	98	-	-	4	2.0	199	100
Restrictions on the disclosure of data to the media	187	93.5	7	3.5	6	3.0	200	100
That all CCTV systems are subject to inspection	187	93.0	10	5.0	4	2.0	201	100
That all CCTV systems must be registered and licensed	170	85.0	16	8.0	14	7.0	200	100
Time limits on how long recorded images may be stored	130	66.3	37	18.9	29	14.8	196	100
The right to see any data, including images, recorded about me.	107	53.2	44	21.9	50	24.9	201	100
Clear and obvious signs so I know if there is CCTV in the area.	91	45.3	44	67.2	66	32.8	201	100
Restrictions on the disclosure of data to the police	42	21.1	36	18.1	121	60.8	199	100

The respondents widely agree that CCTV should be quite strictly regulated and controlled in terms of official registration, licensing and inspection. Another two third of all find it very important that there should be time limits of how long recorded data may be stored. And they do not agree at all that data could be used for commercial or media interest. A broad majority of around two third find that the police should have access to those data as well as more than the half agree to have the right to see any data recorded about themselves. With regard to the item clear and obvious signs it seems to be of lesser but nevertheless of remarkable concern.

To sum up we retain an overall picture that CCTV has to be strictly regulated with data access only for police or personal use and that there has to be given clear announcements that places are under CCTV observation. With regard to the answers to question 8 we can state that the interviewees prefer to let surveillance be done by police staff and that no third parties should be involved.

2.5 Patterns of recognition of (deviant) behaviour

Behaviour and appearance as indicators of social sorting

Taking now a closer look about what respondents believe what operators are looking for in terms of behaviour and appearance of people observed we found out the following according to question:

(10) In a shopping mall with CCTV, what do you think they are looking for on their cameras? [wait a few seconds for spontaneous answers, them prompt only with A and B categories, not all sub-items, e.g. "are there any other behaviours you think ..." and "what about appearances ..."]

A. Behaviour such as:

Looking for (N=203)	n	%	Looking for	n	%
Theft from store	130	64.0	Begging	6	3.0
Pickpocketing	68	33.5	Rowdiness	5	2.5
Tagging	32	15.8	Dealing with, consume of drugs	4	2.0
Violence, threats of violence	32	15.8	Control of employees	3	1.5
Nervous/ susp. behaviour	31	15.3	Luggage, bombs, bottles of gas	2	1.0
Other	15	7.4	Young people smoke	2	1.0
Hanging out	14	6.9	Shopping behaviour	2	1.0
Walking unsteadily as if drunk	9	4.4			
Vandalism	9	4.4	Total answers	364	

What do these data tell us? First of all and if we assume that the answers to the two overall items behaviour and appearance have not being influenced by the fact that behaviour was asked first then we can maintain the assumption that behaviour is regarded as a stronger indicator for CCTV operators to watch than appearance does.

With regard to the first item of part A (behaviour) of question 10, items concerned with theft rank highest. Considerably less attention is believed to be given to behaviour like tagging or violent behaviour. If we aggregate some items which are addressing forms of criminal behaviour or forms near to or criminal behaviour like violence, vandalism or drugs then it turns out that another 45 persons or 22.2% of our respondents believe that these activities are subject of focussed surveillance. What is more, 31 persons or15.3% believe that nervous and somehow suspicious behaviour is thought of as being an activator for surveillance staff. The other way round this gives some hints about the dimensions of a code of conduct in shopping malls or elsewhere.

With regard to the appearance dimension (next table), scruffies, young people, ethnic minorities and attractive women rank highest, whereas the attention given to vulnerable people, known criminals or a-social people is believed to be more reduced. This is quite interesting in terms of the meaning what is admitted / forbidden and what is not, with special regards to shopping malls.

B. Appearances such as:

	n	%
People who look ragged or dirty	62	30.5
groups of youth	23	11.3
ethnic minorities	19	9.4
other appearance	14	6.9
attractive women	10	4.9
Other	8	3.9
people vulnerable (e.g. sick, old)	4	2.0
Known criminals	3	1.5
Antisocials, punks	3	1.5
Drugs/ addicts	2	1.0
don't think/hope they look for any special appearance	1	0.5
Multiple answers N=	149	

Taken together it is believed that surveillance staff is focused on the behaviour of certain groups and on property related crime. Thus it is believed that CCTV has to maintain the shopping order in terms that you are not tagged and that violence, vandalism and suspicious behaviour which could derange the shopping adventure is being suppressed.

However other functions which could be achieved by CCTV like

- help for vulnerable people or
- looking for well-known criminals which address more societal/ protective objectives is not believed to be an issue.

We must admit that we still do not know how to explain this but we may advance some tentative arguments: As the statements represent assumptions of the interviewees about the real activities of the CCTV staff in a shopping mall we can suppose that the answers to this questions may mirror two things:

First an account of what can be normally expected when surveillance work takes place in a shopping mall and second and more in a way of mixing together both

a perspective of "taking the role of the operator (how does he watch, how would I watch)" and a remembering "some pieces of knowledge about the public discourse on surveillance".

By comparing both sets of knowledge an individual may try to make sense out of this to answer the question of what CCTV work is about in a shopping mall:

- It is about filtering out people who do not correspond to the shopping milieu.
- It is it less fighting crime beyond theft and pick-pocketing.

It appears that the assumed surveillance activities are classified according to an instrumental / functional orientation (shopping) whereas the other side of watching (over) somebody and finding out about his needs in a more sympathetic or human way are excluded.

To sum up we may say that the thinking and guessing of the interviewees about the orientation of surveillance of CCTV-operators in a shopping mall are coined by attributing a somehow instrumental or functional orientation or structuration to the operators. One dimension of this structuration is framed by the connotations of criminal behaviour or behaviour that is not in line with the house rules of the mall and its core business. The "appearance" orientation is mainly given by bodily attributes expressed by a certain code of dressing, age, gender and other cues from which stigmatisation activities may be stimulated.

However and taking into account the findings of our participant observation we would only partly agree with these assumptions. The operators in CCTV watched shopping malls are less oriented towards crime fighting. The core activities is to maintain the business process of the shopping mall as a whole and that means that more attention is given to control whether the shopping mall (as a conglomerate of technology, space, architecture and people) works sufficiently good to allow the shop-owners to make money.

Dimensions of maintaining a disciplinary order in a Shopping Mall

Taking these patterns of orientation (CCTV watch in a shopping mall is assumed to be more instrumentally and less socially shaped) as a guiding principle on how to behave inside a shopping mall under CCTV surveillance, we can point to the fact that CCTV-induced regulation of behaviour is only resented by 39 or 19.2%, while around 80% (162) reject this possibility..

Question 11

Affects respondents behaviour	n	%
yes	39	19.2
no	162	79.8
Total	201	100.0

However by looking to the ways in which the regulation of behaviour is being managed we can point to some interesting results:

11 A. Does affect my behaviour in shopping malls

Regulation of behaviour as(N=39)	n	%	rank
E) Feel observed behave carefully	10	25.6	1
F) Feel uncomfortable and try ignore CCTV	5	12.8	2
L) Other reasons	5	12.8	2
J) Less expressive/ and a little anxious	4	10.2	4
G) Steal less because feel observed	4	10.2	4
A) Behave nicer	3	7.7	6
B) Know someone is watching	2	5.1	8
I) Try to be funny	2	5.1	8
D) Get ejected because of CCTV	1	2.5	10
H) Avoid places with observation	1	2.5	10
K) I pay attention to the cameras	1	2.5	10
C) Feel no privacy	0	0	12
	38	97	

If we take the items A, B, D, E, F, H, I and J as indicators for individual strategies of the self to regulate behaviour, it appears that behaviour, esteemed to be appropriate, is the most frequent strategy. Furthermore, the appropriateness of behaviour seems to be influenced by two major considerations. First to choose a very radical strategy of conflict resolution that is to avoid places under video-surveillance. Or, to regulate one's own behaviour in a way that is expected to be accepted by a generalised other. Thus we may state that CCTV is a successful functional tool to stimulate discipline. Items A, B, F, H and I and J point to slightly differentiated patterns which focus either on active strategies (A, H, F, I, J) or on a diffuse feeling of being observed without manifest reactions to this (B, J). Only one person reports of avoiding places with observation. It has to be emphasized that only quite a small number of all interviewees admit that cameras influence their behaviour in terms of selected activities. Another and smaller portion feel uncomfortable in terms of feeling being watched. Furthermore there are some clear hints that "stealing activities" are suppressed when CCTV is in operation.

2.6 Dimensions of feel and behave

With regard to those who answered that the knowledge of being watched had no effects on their behaviour (162 cases or 80%) some further results can be presented to describe this attitude with some more details:

11 B. Does not affect my behaviour in shopping malls

Reasons (N=162)	n	%	rank
I don't care	38	23.4	1
nothing to fear/nothing to hide	26	16.0	2
doesn't affect b/c always behave right	25	15.4	3
doesn't affect me b/c I don't have the intention to steel	14	8.6	4
I do my thing and leave	12	7.4	5
have other reasons why camera does not affect	8	4.9	6
doesn't affect b/c good citizen	6	3.7	7
doesn't affect b/c don't notice	5	3.0	8
doesn't affect me b/c I feel safer	4	2.4	9
doesn't affect me b/c I'm used to be observed	2	1.2	10
doesn't affect b/c can only be me	1	0.6	11
Total	141	87	

We can identify two main patterns: Items like: Nothing to hide, always behave right, good citizen and Can pay, don't need to steel all are addressing quite the same issue (69 persons) which refers to a somehow conformist type of behaviour of the urban dweller.

On the other side we find 55 people of a more urbanite orientation with attitudes like: "Don't care, don't notice, do my thing and leave" who express a more or less functional or rational attitude and a routine/ experienced urban behaviour towards the fact that CCTV is in operation while shopping.

So we eventually may conclude that one part of the interviewed perceives the shopping mall as a stage where one has to prove being a good citizen. Others, however, perceive the shopping mall and the shopping exercise as a mere functional activity: the shopping mall is not a stage to expose oneself. The shopping mall is a space to satisfy reproductive needs.

2.7 Discussion of outcomes

Place: Familiarity with the site where CCTV is being installed/

Familiarity with the site is quite high and most of the interviewees are conscious that the site is under surveillance. However they have no concrete knowledge about the real location of cameras. Furthermore it appears that people make reasonable guesses about where CCTV is being installed in urban space. However there emerges a diffuse picture whether the cameras are being estimated as being either good or bad. Sites or locations which are related to risk potential are estimated as being good for video-surveillance. Sites which are more connoted with privacy/ private space are less accepted (not in my backyard). It seems that the acceptance of CCTV is very much dependent on the locational context where cameras are being placed. There is a general and broadly shared

opinion that cameras are to be found mainly in publicly accessible places, at subway platforms and at banks.

Potential: Opinions on the awareness, perception, diffusion, potential, usefulness, benefits and risks of CCTV

Technology is seen as being powerful but applications could show more benefits. Opinions on the usefulness of CCTV are quite sceptical. However people generally do not reject CCTV and largely agree with the nothing to fear argument: they obey to the law, or have nothing to hide, are good citizens and the like. But even those of the interviewees who express a conform acceptance of CCTV are concerned when getting clear about the fact that CCTV could invade more into places where they live (own street). Furthermore most of the people show more critical opinions when it is getting clear that CCTV is not only used to surveill those who have something to hide but even those who have nothing to fear.

Efficiency and practices (guesses about the practices of social sorting / classification of the control staff, opinions on security staff):

Security staff should be either resorting from the police or from professional security companies. Security staff looks at criminal behaviour, controls the order of the shopping malls by applying visible cues as sorting out filters (dress codes, age or gender) to find out about people who may disturb the shopping exercise. Watching activities of the security staff is driven more by an instrumental and multifold orientation where crime prevention and crime reduction is playing one role besides others.

Order: Opinions on rules and regulations of CCTV

CCTV has to be strictly regulated and controlled by public authorities. Data access should be given only to the police and to individuals on their personal demand / involvement

Individual impacts/ coping: Opinions on the impact of CCTV on ones own behaviour. Most of the interviewees deny that CCTV could influence their own behaviour. However, those who do not so, react by regulating their behaviour in specific ways or by feeling – in a diffuse way – uncomfortable of being watched.

With regard to the above presented outcomes of our research a contradictory picture emerges. To start with we have to state that quite a number of the interviewees are aware of the fact that there is a lot of video-surveillance within the urban space they live in and that they are almost every day confronted with the fact of being observed. It seems that they suppress or sublimate this knowledge and that most of them do not care for CCTV in terms of producing manifest changes or regulations of their own behaviour. On the other hand there is considerable concern about the usefulness of CCTV. Most of the interviewees express first positive opinions when asked whether CCTV is either good or bad. However when going more into details, and when the interviewees have learned a little bit about the e.g. menacing invasion of privacy, sceptical and even negative

opinions are being articulated. Moreover, there is a clear vote for a sound regulation of CCTV in terms of licensing and control of the practice of CCTV-watch and, even more interesting, a vast majority votes for the involvement of police staff and not of private security companies to operate CCTV. Most of the interviewees are impressed by the sobelieved control potential of CCTV; most of them opt for comprehensive solution of the deployment of CCTV in terms of watching, recording and storing. Thus: CCTV – as a comprehensive solution – is fine when applied at sites which are connoted with risks. CCTV is less accepted when connoted with privacy.

Above we have argued that the orientation of urbanites is coined by a kind of suppression of the overall influences, challenges and demands of urban life. According to G. Simmel the urban individual reacts by adapting a kind of special behaviour to cope with these challenges. It appears that Simmel's observation is in line with the opinions of our interviewees. They know that the urban condition is framed by the fact that there always is a synoptical gaze of the generalised other when experiencing the big city. And it seems that most of them understand to date CCTV as a technological add-on or enlargement of this urban synopticon. Maybe they are right. Maybe they are wrong and subject of a profound misunderstanding. To explore the individual orientations a little bit further we will now present in the next section on social effects of CCTV, the outcomes of ten additional in depth interviews with visitors of shopping malls.

3 The qualitative study: Social effects of CCTV

3.1 Sample description

The interviews have been conducted at BIS between August and September 2003 and included the following respondents:

Sample qualitative interviews

	Female		٨	Nale
	<30	>50	<30	>50
poorer	13	I 7 ®	I 2	18
richer	I 1	l 5	I 4	19 ®
deviant/ subcultural	I 10			16

(®= on retirement)

Among the interviewees there are three persons (all belonging to different age groups) who are still undergoing professional training, studying at the university or at a high-school. Further five are working as employees doing research and development (technology, social sciences), management tasks or working within the service economy. One of the students is a part-time worker as saleswoman. Two persons are on retirement. They both have an academia background and one of them had a leading position in a state-agency for export in the former GDR.

With regard to the deviant or subcultural dimension of the sample we have to emphasize that person 110 and 16 are understood as deviant / subcultural in terms of their quite opposite position in social space with regard to all others:

110 is living as a single female together with her son. She is working part-time as saleswoman and she is studying at one of the universities of Berlin. She is working in a civil-rights movement and the only person of all interviews who radically neglects CCTV.

I6 is different from all others as he works as a field worker for an organisation which controls whether people pay the fees for TV and Radio or not. Thus it may appear that his opinion on CCTV and control may be to a certain degree being influenced by his overall professional attitude.

3.2 Experiencing the city and everyday behaviour

Experiencing the city is being framed by existing time-space relations which are structured by everyday behaviour of the interviewees. We suggest that the everyday behaviour disposes of a range of degrees of individual freedom which allows for a more restrained or more enlarged experiencing of the city. Thus we understand a rigidly structured day or a working day with a high amount of repetitive activities as typical for

most of the interviewees. Besides we have two further types which are different: these are those who are doing mobile or part-time flexy-work, those who are doing work and education at the same time and finally those who are on retirement. The next table shows the distribution of those types with regard to their preferences to pleasant and unpleasant places:

Туре	Pleasant place	Unpleasant place	Behaviour	Characteristics
I. Rigidly structured time-space relations: routine working or training day (12, 13, 14, 15, 18)	Known places, quiet places, clean places: High-streets, parks, residential areas; shopping malls	Crowded and dirty places, underground, stations, places which are not lighted, working place	Avoiding unpleasant places, prevention, getting nervous and aggressive, sceptical and alerted; not feeling at ease	Knowledge Density, Aesthetics Safety/ Fear
II. Rigidly structured time-space relations: routine of everyday behaviour (17, 19)	Green and open space, known places, own estate outside the city	Crowded and dirty places, underground, stations, underpasses	Avoiding unpleasant places, prevention, very cautious and alerted; always being at a distance towards other; intervening if possible, active self protection	Knowledge Density Aesthetics Safety/ Fear
III. Flexibly structured time-space relations: part- time or mobile working (11, 16, 110)	Working place, home, known places, quiet and crowded places, urban places, high- street, university	Administrative places, unpopulated or unfrequented places, shopping center, train stations, anonymous places	More attentive, alerted, prevention, not feeling comfortable, getting nervous and hectic, being ready to escape	Knowledge Time consuming Urbanism Consumerism Fear

We can state a slight but nevertheless remarkable difference in the perception of urban space according to underlying time-space relations. Type I and type II though different in the pattern of time and space have a somehow similar perception about pleasant and unpleasant places. Both prefer places which they know, which are clean and less crowded unless they serve for shopping purposes like malls or high-streets. More transit or traffic oriented places like underground platforms or train stations are disliked. So the distinction between pleasant and unpleasant places is being drawn along the dimensions of knowledge, density, aesthetics and safety. With regard to type III with a flexibly structured time-space regime, the picture is more differentiated and it appears that this type is more inclined to explore the city and to appreciate the feeling of discovering urban places. Overall it turns out that between the different types there is a considerable degree of commonalities and only some slight differences. The commonalities are to be seen as characteristics of places which are known (because you know the people there),

which are not dirty and where a certain urban flair is prevalent like in high-streets. Nearly all of the interviewees show also a preference for quiet and not crowded places like parks and green space. And nearly all express their dislike of transport sites either as underground platforms and train stations, whereas two express that riding urban mass transport is pleasant.

With regard to individual strategies of how to behave in situations when dropping into unpleasant places it clearly turns out that there is a common understanding of how to behave: to avoid such places and to take some pre-emptive measures. Some express that they resent the unpleasant character of the place in terms of feeling nervous and hectic, being ready to escape or in getting aggressive or sceptical about what happens and what might happen. Besides these reactive strategies there is only one who expresses that you can do more if necessary and if the situation allows for. This person - a seventy years old male on retirement - explains that you can protect yourself by applying a set of rules, which start by making a judgment on the dangerousness of the situation and which end by intervening or by escaping or avoiding the place. For self-protective purposes he himself has always a whistle and a torch in his pocket. Nevertheless the most dominant behaviour within our sample can be termed as a twofold strategy: either to avoid these places, or in case you have to pass through, to adapt your behaviour by preventive measures. The statements of our interviews express that the perception of an unpleasant place is not always being co-noted with dangerousness. They are unpleasant because one has to adapt his behaviour or because these places stimulate a somehow uncontrolled inner reaction like being nervous, hectic or aggressive.

3.3 Experiencing consciously of being watched

When being in social situations everybody knows the feeling of being watched. It appears that the variety of how one is watched or looked at and how one is looking at other people is dependent of the actual situation. It is a common experience that when being inside an elevator most of the people are staring to the ground. Outside closed rooms in open streets the looking behaviour appears to be different. In big cities nobody is really looking at you. However, in smaller cities or in villages you expect being watched but not always overtly. In the undergrounds the typical watching behaviour is to apply a panoptical view to assess the situation and then to get back to read a newspaper or just to look to nowhere etc.

When asking whether there are situations in which the interviewees do consciously feel being observed and how they react to this we found out that these situations are perceived according to the specific role and attitude/or appearance of the actor who is looked at. Thus it appears that unpleasant feelings of being looked at are produced when a group of different people (elderly, skins) are staring at you:

"Sometimes these gazes are really attacking, sometimes it is fun and then I respond with a smile... if you are in a good mood it is not annoying if somebody looks at you."(I5)

A different perception is being expressed by a male who cares for his girl friend:

"If I am together with my girl friend and other guys are undressing her with their eyes, this is very unpleasant" (I2)

Or:

"If you are in areas where the skins have the power, you are identified as someone different because you do not wear the right garment and you do not know the right code of how to look at them (you better do not). Then you are an enemy and you will feel the reaction." (I2)

A second type of unpleasant feeling of being looked at has been described by a younger woman who felt stared at by a "dirty old man":

"He gazed in a sexist way at my sister and me. When we left the café he was following us and so we disappeared into a building and leaving it by the backdoor. I guess he has been waiting for us for some time." (13)

A further type of unpleasant looks is associated with being looked at in a more controlling manner at the workplace:

"If somebody is standing in your back and looking at what you are doing on the screen then I feel very uncomfortable" (I4)

Similarly 16 describes a situation where you receive strong cues that you are being observed:

"On the countryside: if the people behind the windows put away the curtains and stare at you. You realise that you are under control. That would not happen in a big city."

However not all of the respondents are getting nervous about the fact of being looked at. They understand the activity of being watched and of watching oneself as a normal concomitant of urban behaviour to which one can adapt if necessary by taking preventive measures:

"I have trained to realise and to react when someone is watching me." (19)

Or:

"Looks are different in some urban areas and you can look back. But most annoying is the fact that then these guys who have been staring at you, are looking away." (110)

Moreover there was one statement of an elderly man who made a distinction between the perception of the individual as a person and the bodily characteristics of this person.

"No, I do not feel uncomfortable when being watched. When the weather is fine, you see a lot of flesh and forms but then you do not observe the person itself. You are looking at who is passing by. It does not disturb me if somebody looks at me" (18)

Overall most of the interviewees are feeling uncomfortable when being looked at and they express their concern by using a terminology which demonstrates how they do feel. The wording contains idioms like: "to gaze, to stare, to look obtrusively, to scrutinize, to attack with eyes, to undress someone by looking at him." In relation to the situation and the attitude of the actor the corresponding behaviour can be classified according to resting calm (I1, I7, I8, I9) or to qualify staring attitudes as bad manners or wrong behaviour (I3, I5, I6, I10) and finally to express that oneself feels afraid and that one have to adapt his behaviour by adequate measures to be taken (I2, I4, I9).

Thus it turns out that the experience of consciously being watched is both a matter of the characteristics of place and of the ongoing interpretation of the social situation in which the actors are involved. As actors they do have the possibility to react and to find out how to understand the gazes and how to negotiate the situation. This may on the other side cause intra-personal conflicts especially when the person is in a weak position and less able to cope with the unpleasant feeling, e.g. at the workplace or within an urban area where she or he cannot easily escape. So she or he is forced to accept the staring on the screen or as one person said "it is dangerous to look into the eyes of the staring person (respect)."

3.4 Perception and knowledge of CCTV in the city

Overall the majority of the interviewees are in favour of CCTV in the city. Only one of all completely rejects CCTV. However the reasons differ, why CCTV is so broadly and positively accepted, and it is worth an exercise to understand with some more details the pros and cons of and the opinions on CCTV. We will start with a short account of the knowledge of the interviewees about CCTV in Berlin; we will then analyse the situation felt of being observed by cameras and then describe if and how behaviour is being regulated, keeping in mind the outcomes of the quantitative study, where we found that only a minor part of the sample did change behaviour when being under CCTV surveillance.

Tentatively we propose to compare the knowledge/ opinions statements on CCTV in the city with those of the previous section where we identified three different patterns of behaviour when being looked at face-to-face: resting calm, qualifying the look of the other as wrong behaviour/bad manners, feeling afraid and reacting by adapting ones own behaviour.

The first group includes interviews (I1, I7, I8); the second (I 3, I 5, I6, I 10) and the third (I2, I4, I9).

We have produced the following table drawing on knowledge of cameras in the city, on the reasons why our interviewees think they are there and on their guesses concerning who should do surveillance work.

Type of behaviour	Places of cameras	Reasons for cameras	Expectations
Calmness (I1,7, 8)	Shopping malls, shops, banks, open- street, transport (platforms, underground, parking decks,	Safety and control, deterrence, crime reduction and prevention, to catch the criminal, to reconstruct events and evidence, to observe who comes and goes	Well-trained staff (private company) to control order and security, to control work and events
Wrong behaviour (I3, 5, 6,10)	Shops and shopping malls, trains, bus, underground, platforms, fitting rooms	Deterrence, prevention of crime, see how the customer behaves, market research, to control every single citizen	Qualified people with a clean record, formally trained detectives, highly qualified personnel, no police they are incompetent, staff must be able to draw reasonable conclusions from what they are seeing
Being afraid (I2, 4, 9)	Warehouses, shops, shopping centres, everywhere, open places and streets, hidden cameras	Prevention of crime and violence, multipurpose, crime prosecution, evidence, market analysis	Qualified staff not making money by selling pictures from CCTV, not watching all the time but recording; comprehensive security solutions, highly qualified personnel responding to various tasks.

There is considerable awareness of where the cameras are being placed within the city beneath all types. Thus we can state that there is a rather good knowledge about the diffusion process of CCTV and that nearly all of our interviewees are knowledgeable about CCTV. We have to add that two persons of our sample have a special knowledge on CCTV. I8 is actually undergoing training within a security company to learn about CCTV and how to handle it. Person I9 is someone who characterises himself as somebody who knows "everything" about the camera:

"I am a specialist with cameras because this was my job when I was working. I can make a difference between real and dummy cameras. I know a lot about hidden cameras: You need to have an armed eye to detect them all." (I9)

Overall and broadly shared is the opinion that CCTV seems to be necessary for crime prevention and reduction (theft), to deter criminals etc. A second purpose for the deployment of CCTV, taken into consideration by those who seemed to be more professionally experienced on CCTV, can be characterised as watching at people to learn about consumer behaviour:

"I would suppose that the cameras are good to observe the consumer when shopping. Where do they look at, in which offers are they interested. [...] The shop owners are always rearranging their offers because they did remark something. [...] I can imagine that there are analyses. Market research." (15).

Another person (I8) reports that the cameras are being used to control the behaviour of the employees:

"The control staff is sitting behind the monitor and is watching corresponding to their daily mission whether order and security should be established or to control the employees: whether they are stealing when counting the money. [...] Some of them use the cameras to document whether you have be in time for work or if you have been too long away for your break. Within a bank they also look if there are persons who do not feel at ease."

Or:

"CCTV serves to achieve multiple purposes. [...] High-resolution systems can filter out those who are wanted...you can do a comparative analysis on your PC and you can use it for commercial purposes: to observe the consumer in department stores, how they behave corresponding to age and gender."

Finally a more critical assessment/ attitude of CCTV notes that there has to be made a difference between the official explanation of the purposes of CCTV and the more hidden agenda for the deployment of CCTV:

"Officially it is to identify later on potential criminals. But in reality it serves to build up an infrastructure to control the citizen. Nothing is impossible and I believe that CCTV is thought of to control every single citizen, to check what he is doing, or to see, how my everyday life is looking like. Everything started with credit cards. If they introduce biometrics who knows whether the cameras will be able to read faces (recognition)? I would prefer to freely walk around without the feeling that somebody knows where I am. Today it is already enough with mobiles. One can locate me if the mobile is switched off. That is too much." (110)

Quite opposite to the findings of the quantitative survey, it appears that a preference for either police or private security staff has less importance. More weight is given to the training and qualification of the control staff. Only well-trained or highly qualified staff should be allowed for CCTV surveillance:

"Control staff should resort from professional security providers not from the staff of the shop."(I1)

Or:

"Only serious people with a clean record. And you have to make sure that they are not going to sell voyeuristic pictures or that they will use their power to try to approach women in a sexist way or [...]" (12).

Some of the interviewees are aware of the fact that the training and professionalism of the observers has to be shaped according to the importance of their tasks:

"Most of them are not well trained. They just look at the tapes. [...] It depends on the objectives they have to follow. Somebody who looks at thieves observes differently as those who have to sort out conspicuous people. If the observers are from a governmental department then these are persons with social sciences background, they know how to categorise people corresponding to their behaviour."

Similarly 19 argues:

"You have to make a difference whether you are focused on shop-lifters or on security issues to fight terrorism. Inside this area you will find well trained professionals who really know about the characteristics of terrorists and how to fish out those from other people."

A further and more advanced position is being articulated by I10, a person who has a strictly negative attitude towards CCTV. From personal experience she knows that police staff abuses its power to access data bases to identify other persons for private reasons. Thus she expresses that she is not confident in police staff and opts more for highly trained and experienced private security staff:

"I have a special demand regarding people who treat those data (collected by CCTV). Only those who have an excellent training – including social competency – should be allowed to do this kind of work. Those who are doing the work actually are incompetent and many of them have a human deficiency. It should not be allowed that they have such a powerful position. I am really afraid of this. [...] If the policemen read the yellow press – this is very questionable. I never want to have to do something with those guys. [...] I would not object if people from academia would do the job because they will try to be more objective." (110).

Compared to the overall knowledge of CCTV in the city as found in the survey, most of the respondents demonstrate similar perceptions of where the cameras are being situated. However within the qualitative sample there are two persons who focus less on the locational aspect and more on the system-like character of CCTV. I9 is talking about a comprehensive security system which has been already installed and remarks that the cameras are everywhere. Whereas person I10 knows about the widespread tendency of growing CCTV deployment because this will serve "to build up an apparatus (a system / an infrastructure) to control the citizens." Both of these two persons - though stemming from very different social and professional backgrounds – further agree that there are multiple purposes of surveillance and that CCTV can be used to support a wide range of possible applications. This understanding has not been made so explicit by other respondents. However there is one who expresses a considerable concern. She is remembering her life during the GDR period when the population and she herself have been surveilled everywhere: at work, together with the customers, when walking around etc.:

"Finally this permanent surveillance feeling ended up with paranoia and it had nothing to do with feeling safer. I did not. It had to do nothing with safety; it was just to harass us." (15)

So what we can see here is not only the fact that some of the interviewees perceive the world in terms of fear and crime and who opt for a wide-spread use of CCTV (I2, I9). There also exists something like a fear against CCTV, concerning the potential of a total coverage of social and urban space by surveillance technologies (I5, I10). Both positions have in common that they demand for better trained control staff according to the importance of the tasks and to avoid any abuse of the data or of the power of the one

who gains additional knowledge by observing other people. Thus – like in the survey – we can state that there is considerable concern with regard to the training of the observers, to data-protection, to staff – competence and ethics especially when using additional power resources (like data bases with personal data) which can be accessed in an illegitimate way by police staff.

The overall pictures on the perceptions and guesses about CCTV in the city that emerges from these statements can be described as one which still is in the making. Cameras are perceived mainly within the space of everyday life especially with regard to shopping and transport activities for reasons of deterrence, prevention and safety. Improvements can be made by providing better training of the staff. However it is equally remarked that the system is already more evolved and that it serves multiple purposes: market analysis, tracking of consumer flows, location and tracking of single persons. Moreover the system or the apparatus is still growing and its final objective appears to control every single citizen. This total solution however will according to the meaning of some not contribute to support safety. On the contrary it is perceived as a very annoying attribute of everyday-life which can produce fear and paranoia.

3.5 Regulation of behaviour when being watched by CCTV

Above (section 3.3) we have identified three different types of reactions how people feel when being looked at by other people. It has been shown that most of the respondents felt uncomfortable and that the rest was either ambivalent or did not feel deranged because it is normal that people look at each other. Both groups reported that there exist opportunities to answer or to respond to those who were staring, gazing or looking at you, by means of verbal or non-verbal interaction. Thus you can in most cases actively contribute to negotiate the situation because you can see who is looking and what he is doing. When watched with camera this not the case and the balanced interaction of real mutual watching is being swept away and causes uncertainty. There is no direct feedback. Thus the question remains open how do people act in environments which are rich of CCTV?

The quantitative survey showed that most of the interviewed people expressed that they would not change their behaviour when being watched by CCTV. And most of them, even though expressing that they did knew that the site was under surveillance, did not try to figure out where the cameras were located. We suggested interpreting this behaviour as a kind of suppression (*Verdrängung*) which is typical for the urban dweller who does not so much care about the existing infrastructure of surveillance. At first sight, the statements, given to this issue by our respondents in the qualitative study, are pointing into the same direction. It seems that only a minor regulation of behaviour will occur. The main argument to explain this is the overall feeling that "you are not aware of being watched by cameras" (12, 18) or "I am only aware of cameras for a very short

moment; then I will forget about" (I6) and "I do not feel observed because there are so many other people present (I1)."

The quantitative study evenly demonstrated that the respondents did make a difference with regard to places where cameras can be accepted or not. It turned out that the more the camera invaded private space the more negative people felt about it. The qualitative study reveals some interesting details about this. Some of the interviewees are concerned when cameras are used to control fitting rooms:

"But then you know that you are being watched and that is ok." (12)

But it is also mentioned that this configuration can only be accepted if you can be sure that the purpose of this type of surveillance is to hinder people to steal cloths and that the intimacy of the dressing/undressing exercise is being respected. It appears that it may occur that the security staff in the control room does not apply an adequate code of behaviour and "that there are guys who look at women who undress... however you never can be sure if somebody is watching you ... maybe there is somebody sitting behind the mirror. This is very unpleasant." (I2) More positive attitudes concerning CCTV solutions (when surveilling dressing and undressing in a fitting room) were mentioned:

"I do not like to be looked at by persons standing very close to me. Or salespersons who come into the fitting room. Then I prefer to be looked at by CCTV. This is more at a distance." (I5)

However, not only the invasion of intimate space seems to be problem. One younger person did express of getting nervous when supposing being watched by a camera:

"Some cameras are always moving automatically [...] and if this happens I will stay in front of the camera and try to figure out if it is me who is watched at or somebody else passing by. You are really getting paranoid and you are thinking oh shit, now you are being surveilled, you have been up to something." (I3)

It seems that in this way the camera contributes to play a very authoritative role by evoking a bad conscience. Similarly I2 notes that if he realises that a camera is tracking him, e.g., at the airport that he feels of being looked at like a terrorist which is a very unpleasant feeling. A more reflected concern is being expressed by I10 who states:

"If I see a camera targeting at me – this is very unpleasant... because you never can tell who is sitting behind the camera and who is watching you. It is not face to face. You are under suspicion; the camera does not respect my privacy. Even when being inside a crowd I always want to have a meter of distance to other people. When being watched by cameras the power relation is not balanced, the watcher is more dominant and I have no control on collected pictures."

It is a commonly shared knowledge on human behaviour that there are conventions which define the scope of intimate space which has an extension of around of 0,7-1,5 meter. When being together with other people you always have the opportunity to

control the respect for this convention by direct action (going away, step aside). When being targeted by a camera this convention can be easily broken and this is possibly felt as an individual injury or as an insult / humiliation (*Kränkung* – in a way that the feelings of the person are hurt).

However these feelings are not always being made explicit by the respondents who circumscribe them like:

"It is this uncertainty, how will this be used for, is somebody behind the screen or not, who is looking at me? You evenly don't know, are there more of these cameras, are they tracking you, is your itinerary monitored?"(I1)

Or:

"At the bank: when the camera is exactly pointing to your neck, then you are thinking, do not make any silly things, they will be aware of this." (I4)

Respondent I10 goes more into the details:

"I never know who is looking at me. It is anonymous, the camera is between, it is not eye-to-eye. You cannot go there and tell them: Why are you staring at me? There is always a flavour of suspicion in it. This goes to far because of the camera does not respect my privacy. You are being observed and filmed and the underlying power-relation is not balanced. Then I am inferior to the watcher who will be dominant."

To cope with these forms of illegitimate action, those who know about cameras or are more sensitive towards CCTV (the minority) seem to understand the perception of cameras as a sign to regulate their behaviour. This can be done in various ways.

"I will behave not as naturally as usual because you know that they can take a picture [...] but I would not change my behaviour, not avoid places."(I1)

Or:

"No, I would not change my behaviour, would stay naturally, maybe making faces." (15)

Similarly I2 expresses:

"No, I would not change my behaviour. [...] Together with friends we will look at the camera and do some friendly staging."

Another person points to the experience of self-observation when being aware that cameras are around:

"In most cases I do not perceive cameras consciously. However I do at banks and on platforms. On open places it would not interest me. Sometimes I control myself by taking the role of an observer of my appearance: How do I look like in this setting?" (I4)

So it turns out that even those who do not admit that CCTV will change their behaviour do react to CCTV by different means of self-control or by trying to build up (friendly)

relations to the observers. However more explicit and expressive actions are also being applied. One person reports:

"I have a tool to dazzle the camera, a very powerful torch [he calls it a "light dagger" / Lichtdolch, F.H.]. If I do not want to be filmed, I switch it on. [...] You can protect yourself against a lot of things." (I9)

The same person points out that in general he feels safer if CCTV is in operation:

"I do not support the argument that you are not safe because CCTV is an alibi and nobody will care if something happens. On the contrary, if someone else (CCTV-operator) is looking then my own standing to handle a critical situation is being improved. Maybe I feel strong enough to intervene because I will get help soon."(I9).

As already mentioned, some try to find out whether the camera is targeting themselves or other people. Furthermore and in relation to the specific location of the camera within urban space (no go areas) the camera can be understood as a "sign for danger" (14) where one gets alerted and has to adjust ones own actions according to the situation. Thus I10 directly responds to the gaze of the camera:

"I will immediately change my behaviour. I will try to escape and to get out of sight of the cameras. I will always avoid places where I suppose that cameras are tracking me."

To sum up, the results concerning the regulation of behaviour, we may reflect on the underlying model of how action is being initiated, performed and negotiated. We understand this type of action as special case of communicative action which is being framed by the underlying situation and the actors (alter and ego) involved whereas ego is the one who is being observed and alter is the observer. Alter is not directly visible but the corresponding camera is taken as his extended eyes. The rules of how close alter and ego can come together are socially coded and regulated and it appears that you only tolerate a violation of this rule, if you will get an additional benefit. This benefit is being described as "feeling safer" or getting "additional support" or in more general terms as protection and prevention against/ of crime. Thus the overall attitude is: CCTV is a good thing because it gives a clear benefit for all, to the shop owner and to the society as a whole.

However when it comes down to oneself, the general understanding of the situation is being re-assessed. It appears that first of all ego wants to find out if he is addressed or not by *alter*. He cannot deny this fact when being in fitting rooms where he knows that the cameras are there. Thus he begins to make a series of assumptions about and tries to rationalise about potential actions of *alter*, e.g. in a fitting room:

- The cameras are justified to protect the property of the shop owner.
- The cameras are more at a distance and respect my preference for more anonymity.
- The pictures are not watched but only recorded

- A general code of conduct which respects my privacy is being applied
- There is someone sitting behind the screen

A further situation has been characterised by our interviewees as being outside or in spacious places, where it is not clear at first sight, whether the camera is targeting a specific person. So, those who are more aware of cameras try to find out:

- Is it a dummy or a real camera
- Is the camera in operation (moving, gazing in my direction)
- Are there additional cues which may signify the place as a dangerous place

It appears, then that the actor (ego) perceives and interprets the situation according to the information delivered by guesses and actions on / about alter and the place. So the next series of assumptions within the overall communication process of ego and invisible alter are more vague because they are oriented towards knowing more about the intentions of alter (ego is taking the role of alter)

- Does alter really target me?
- Who is alter and what is he looking for?
- Does *alter* take pictures etc.

After these two sets of assumptions have been treated by ego he can either draw some conclusions on how to behave or react in a more spontaneous/unplanned or less reflected way

- Anxious, paranoid feeling: Did I make a mistake?
- Ignorance or suppression: no obvious change of behaviour
- Awareness, passive reaction: change of behaviour in a moderate way
- Expecting help and support: alter will help if the situation affords for by delivering evidence
- Counter-action, manifest reaction: Escaping the camera, staging trying to get into contact with alter, punishing alter by dazzling his extended eyes.

Most of the respondents were arguing that they did not change their behaviour. Nevertheless, it turned out that nearly all of them made some adjustments even when saying that they were ignoring or forgetting about the camera. Overall it appears that we can state a regulation of behaviour when cameras are being perceived. And this regulation can take various forms ranging from diffuse uncertainty or even paranoia, to well deliberated regulation as escape, avoidance, or other counter-actions or as hoping for help to support individual actions by someone who is probably (not) sitting behind the screen of a monitor.

3.6 Opinions on CCTV

In this section we are going to explore the overall opinion on CCTV of our respondents. Coming back to the findings of the quantitative survey we would expect a broadly shared positive opinion on CCTV. In fact the qualitative study shows a lot of similarities, most of the respondents express that they would welcome CCTV. In some respect this is not surprising taking into account the rhetoric of fear and crime so widely used within Western societies. However one of our respondents suggested that "the further development of surveillance and the advanced deployment of CCTV can be seen as an expression of the actual state of societal development and adds: "the bigger the social difference between people the more you need surveillance". (15)

Thus it would appear that the positive opinion on CCTV would mirror a quite conformist behaviour of our respondents. One can ask the reasons why this should be the case and it seems that there exists indeed a broadly shared argument of the impact of somehow diffuse and not clearly defined "constrained circumstances" (*Sachzwänge*) to promote CCTV. The typical statement goes like this:

"That [the need for CCTV, F.H.] is a sorry state of affairs. You have to do it. It is a must [...] but not everywhere." (16)

And is further explained by the following assumption:

"If I were a rich and important person and if I would have a house on my own, then – although I would feel silly about it – I would install a camera. [...] Because [...] when I am in a social position where somebody can threaten me and if somebody would invade my home and kidnap my wife or my child, then I would like to protect that even though I myself would feel terrible about. But I would do to protect my own interests." (16)

Those constrained circumstances are mainly brought about with deterrence, protection of property, crime prevention and reduction, fighting terrorism, vandalism, urban decay etc. at locations which have been classified in a previous section of the survey.

According to general observations on society constrained circumstances can be resumed as being part or mediators of an overall resented uncertainty. Nearly all of the respondents make a difference between places where CCTV is ok and as well needed to ensure safety/security and other places where CCTV is not. However they are giving no hint why the no-employment of CCTV, e.g. in swimming pools should be better to fight terrorism as vice versa. Thus we have to accept that the opinions on CCTV are somehow contradictory. Beneath all our interviewees there was only one person who had an explicitly negative opinion on CCTV. All other followed the "yes ... but" argument which bears quite a lot of inconsistencies.

Nearly all of them stress the point that CCTV needs regulations and should not be deployed everywhere. Again, it is being emphasized that more intimate places or places which serves as retreat space for leisure and detention like parks, swimming pools etc.

should not be monitored. It is evenly stated that CCTV has to follow the rules of data protection and that the opportunities for networking of cameras should not be allowed for.

A second objection is being made concerning the use of observational data. Those data should not be used to allow for market research or for getting arguments to downsize staff. Overall it turns out that the most common argument, to decide whether or not CCTV should be employed, is that there must be reasons like crime, violence, or vandalism which legitimate CCTV. Furthermore it appears that opinions on CCTV to be more driven by ad hoc arguments which are being broadly disseminated within the everongoing media noise:

"The media produce a lot of fear. This serves to justify the whole "packages for security" (110)

And then continuing ironically:

"Everything is for the benefit of the citizen, and everything is awfully violent."

Thus one could advance the assumption that most of the respondents are inclined to believe that we are living in an awful world. To have fear and to suffer from uncertainty seems to be a typical characteristic of the post-modern condition. Together with a diffuse trust in the power of technology this overall condition gives way for the acceptance of CCTV as a means to provide safety which is threatened by other people:

"I personally do not feel pleased being video-surveilled. But nevertheless I feel positive about it because I have the impression that in public space other persons who are potential sources of danger will be controlled by CCTV. This will improve safety."(I1)

Or as 19 points out:

"I feel safer if CCTV is in operation...I do not feel deranged. But those who have something to hide, they will feel bad."

Similarly 12 states:

"I fully accept CCTV. As a detective (taking the role of a detective) I would say that people, who are critical about CCTV, or who are saying 'look out there is a camera', are suspicious. Because if you have done nothing wrong, then you can not feel nervous about."

There are some more arguments provided which seem to prove that one has arranged with CCTV:

"First I was deranged and critical about CCTV. But now – if it deters and prevents crime – it is OK. CCTV can prevent [...] big crime but not smaller crime such as theft." (I4)

And even those who have experienced for long period of time the widespread use of surveillance technologies like I8 do not always object:

"I do not feel deranged. I feel safer. Before 1989 the situation in the GDR war really bad. However there was safety out there. You could go out in the evening. This was not so bad."

However some critical statements were evenly made. During the interview situation one of our respondents, with a "GDR-biography", compared the actual situation of CCTV surveillance with forms of surveillance as personally experienced in former times in the GDR:

"Today CCTV is OK. Theft must be punished. I would feel safer with CCTV but not if the operator is a hundred kilometres away" (15)

After a while of around forty minutes during which the interview continued this person came back to the following:

"I grew up in the GDR and for me this has always had a negative aspect, because we have been surveilled everywhere, even when being together with customers. I did not feel safe any more. I was suffering from paranoia. I had the feeling of being permanently watched, there is somebody following me, to look at what I am doing. [...] This was really unpleasant because you knew that there would be some consequences. This had nothing to do with safety. They were harassing us because we were telling each other our opinions...Today it is more about improving safety. Today I feel more at ease."

But then and remembering all the places which had been identified as locations of CCTV during the interview, I5 exclaimed:

"Oh my god, soon we will be surveilled everywhere."

The same person did also give some further hints to explain why she accepted CCTV. In her view it all depends on the motive of the watcher.

"If you can trust in the motives of the watcher then you can personally accept CCTV. [...] I am inclined to trust more into the market than into the state." (I5)

A much more critical opinion on CCTV is being articulated by I10 who reports on a personal experience to justify a general refusal of CCTV:

"CCTV should serve as a deterrent but who knows whether the cameras are on? Since I have been working at the XY-train-station, somebody stole my cash-desk. Then, I was thinking, I will recognise him. Everywhere there are cameras... but then a policeman was telling me: There is no record available. We only record if we think it is necessary. [...] No, thank you. Ever since I think that the cameras are of no use and the risk of abuse is too high."

Not astonishingly, I10 is also very critical about the competencies of the police to deploy CCTV to reduce or to prevent crime:

"I do not think that the police is able and willing to fight crime efficiently."

That is the reason why she advances an alternative to the overall prevailing model of arguing "CCTV yes ... but" by stating:

"I would prefer to put more weight on prevention and to fight the underlying causes of crime."

There are some more respondents who evenly hold for solutions other than CCTV: to improve the efficiency of the police, to not replace humans by technology etc. However the most prevailing opinion on CCTV is positive because CCTV ensures safety.

Thus the emerging picture on "opinions on CCTV" can be resumed in the following way:

There are some who opt broadly for the employment of CCTV which is generally characterised as being a benefit to reduce crime. However the intimacy of the bodily sphere and private/or leisure space has to be respected. Cameras should either not be allowed or it must be sure that the operating staff has no bad intentions (so that you can be confident that no abuse will happen).

A second group can be termed as rationalist supporters of CCTV. CCTV is justified if appropriate rules and regulations concerning data protection, disclosure of data and the interconnections of cameras are being applied and if the intimacy of the bodily sphere is being respected.

Finally, there is a third group who either completely refuses CCTV and expresses a negative opinion on CCTV or suggests to employ evenly more police before applying a more technical solution.

4 Are there social effects of CCTV?

When we are talking about social effects of CCTV within the context of this study we must be aware of the fact that we only can advance some outcomes on the individual thinking of the people interviewed so far. We cannot assess whether CCTV has contributed to downsize crime rates or that a remarkable amount of displacement of crime has taken place which has led to a more accelerated decay of adjacent urban areas. We only can give some guesses about the influence of CCTV on individual behaviour. By influence of CCTV we understand the fact that a further technology connoted with control and observation is invading the ongoing process of individual decision making on how to feel, perceive, act and behave within an urban environment. As we have pointed out in the sections above, this activity is shaped by the process of perception of cameras and the ascribed/assumed role of the potential of control systems (man-machine configurations behind the cameras) against the urban context and the role/intention of the actors involved.

Thus it appears that the overall and most interesting social effect of CCTV is that most of the people feel safer. This is partly due to the fact that most of the interviewees are quite confident that the technology and the operators will be able to control the area under observation.

However one has to note that this opinion is somehow contradictory to other statements with regard to the qualifications and unknown intentions and practices of CCTV-operators: It turns out that some of the interviewees are less confident in the competencies of the personnel than in technology. Some of the respondents clearly state that they are not sure and somehow concerned about the real intentions and practices of the persons behind the camera. We have suggested understanding these concerns about as a kind of expression concerning the humiliation² of the bodily integrity of the individual which may hamper his self-identity. If this is so, then we evenly have to state that the benefit of feeling safer is accompanied by a process of alienation which probably causes further uncertainty.

We have tried to analyse how people cope with the fact of being watched against this broadly shared background of at the same time feeling safer and feeling more uncertain. It turns out that all of them – when being aware that cameras are there – express that they are inclined to regulate their behaviour in a specific way.

However the modes of regulation are varying corresponding to the experienced practice towards CCTV on the one hand and learned everyday routines how to behave and react in social situations. So it appears that some social effects of CCTV are being produced by

Ongoing discussion: Freud, Sigmund: Unbehagen in der Kultur. Kränkung durch Technik. It is today updated by the discussion about the humiliation by mass media etc. In contrast, the German philosopher Peter Sloterdijk recognises this humiliation but believes that it is possible to resist.

active or passive coping strategies to compensate for the invasion of CCTV into the bodily integrity. Some of these coping strategies are well known and they resemble to a kind of suppression or reduction of awareness towards the urban environment. Others and more active ones are oriented to take CCTV as sign for additional protection or for additional control.

Those who feel safer with CCTV express the necessity of regulation and of data protection. Furthermore they prefer to deploy CCTV not as an overall control technology but as a selected supplement to observe such places which are associated with risk and danger.

Other respondents did express more negative feelings on CCTV and rejected CCTV because it was felt and personally experienced that the objectives behind the applications of CCTV did not meet their expectations that the data collected by CCTV could help to fight crime. Thus they conclude that there must be other reasons to install CCTV than crime prevention etc. For those, the social effects of CCTV are to be seen in the inventing and implementation of a comprehensive control system open for multiple purposes to cover the needs of different interests.