Abstract:

This paper is a follow-up to one of the arguments in the book City of Quartz by Mike Davis, in which the author portrays Los Angeles as a divided metropolis in which, increasingly, social boundaries are being policed by architectural means. The paper looks at the geographical distribution of video surveillance and other security devices in downtown Philadelphia, and focuses especially on the area west of Broad Street where most of the city’s tallest buildings and showpiece redevelopment projects are located. The main part of the presentation is a detailed inventory of security cameras and the specific areas that they scan in the outdoors of a 60-block study area. The paper also presents results of field work about other visible security measures in the study area, such as extraordinary configurations of security bars and barbed wire, and explicitly worded signs that reflect urban social divisions. As far as is known, the map of video surveillance space in the study area is the first such map for any city, both in the US and abroad. The conclusion suggests that, for better or worse, the amount of urban public space, such as streets, sidewalks, back alleys, and open plazas, that is being closely monitored in our cities is increasing, that what was once free access is now being controlled, and that the topic merits further research.

Despite its focus on Philadelphia, this paper began in Tokyo, Japan, the city where I had been doing most of my research and writing in recent years. I first became aware of surveillance cameras as a social issue, and as a topic of geographical interest, while being given a private tour of a newly opened megastructure complex in Tokyo called called Osaki New City. While riding the elevator in one of the high-rise buildings, a fancy hotel, the management representative who was showing me around asked if I could tell that we were on camera. I looked around and confessed that I could not. He then proudly showed where the lens was hidden in the ceiling. A few minutes later he took me to the sub-basement of the building, where there was a bank of video monitors and a small security force looking at them. When my escort pointed out the monitor for the elevator that we had been on, I remarked that this being a hotel, the security personnel probably got to see some interesting things. The guard at the monitor started to share a favorite episode, but the management official cut him off, perhaps realizing that I was not necessarily a friend with respect to this particular kind of activity.

It was also in Japan that I first read Mike Davis’s fascinating book about Los Angeles, City of Quartz (Davis, 1990). It is a rather depressing portrait of of what was supposed to be a dream city. One chapter, called "Fortress L.A.", describes what Davis calls an "obsession" in the monied parts of the city with physical security systems, and with architectural policing of social boundaries, to keep away those with less money. He goes on at some length about the destruction of truly public space in the city; about "sadistic street environments" that are designed to make specific areas in the city
unliveable by homeless people (eg., by having "bum-proof" benches that make sitting for too long
painful and laying down impossible); and about various security devices that stand out in the
landscape, such as surveillance cameras, that challenge potential trespassers to "make my day." Davis
often employs vocabulary that is perfect for the task. For example, a shopping mall in less-monied
Southcentral LA, which has a roof-top police observatory and high-mounted cameras to keep an eye
on the parking lot and all approaches, is referred to as the "Panopticon Mall" (Davis, 1990, pp. 221-
263).

As impressed as I was with Davis' book, I also thought that it was short on spatial sense. Just
how numerous and widespread within the city are the phenomena that he described? Was he indeed
representing accurately a new type of urban terrain, or was he stretching it and getting a whole book
out of just a few examples of defensible-space architecture? It also interested me that Davis was
writing about topics that were related to research that I did in Philadelphia in my years before Tokyo.
For example, I see similarities between Davis and what I wrote (with David Ley) about the use of
graffiti to mark off social territories in the inner city (Ley and Cybriwsky, 1974). Davis's terminology
is quite different, as the field has taken on new ways of expressing its ideas, and many of his
examples are from technology that did not exist twenty years ago, but still there are parallels: a
divided city; contested space; landscape cues about territoriality, and so on.

When I returned to Philadelphia after my longest stay in Tokyo, the downtown ("Center City")
looked quite different. Thanks to a construction boom in the 1980s and shifts to post-industrialism, the
city had a new skyline. Willard Rouse III had managed to break the unwritten rule that no building
should exceed the height of William Penn’s hat atop his (Penn's) statue on City Hall, and built his
enormous Liberty Place complex in the heart of the new office district. Other tall buildings came in
too, as did some plazas and fountains, public art, and new restaurants. So too, the Center City District
had been established, a new kind of municipal agency that collected special taxes in the downtown to
make the area cleaner and better patrolled. For better or worse, some of the older buildings that I had
known were gone, replaced by megastructures that covered whole blocks and cast shadows far down
the street. I saw parallels with the Los Angeles described by Davis, as for example between Liberty
Place in Philadelphia and LA’s Bunker Hill development, as well as parallels with new redevelopment
projects in Tokyo such as the one that I mentioned.

Research Methods

All of these things added up to this paper. I decided to look at downtown Philadelphia more
closely and to learn something about its new social geography. I concentrated on an area called Center
City West, the one-half of Center City Philadelphia that is west of Broad Street, Philadelphia’s
principal north-south divide. This is the newer side of downtown, the so called "zone of assimilation"
into which the CBD had been expanding. The area extends as far west as the Schuylkill River and
numbers about 60 blocks. As a whole, it is a mix of new office towers and hotels, both new and old
shopping districts, institutional uses such as hospitals and museums, and residential neighborhoods.
The latter are mostly to the southwest and northwest, and include both high-rise residences and older
streets with row houses. There is a high concentration of elderly residents, as well as a population of
young professionals. Some of the streets and alleys in the commercial zone have homeless people.
Retailing is mostly along Chestnut Street, one of the east-west "spines" of Center City, while the
principal street for office towers is Market Street. One of the most visible changes is that smoking has
been banned from many workplaces, and that there are now gatherings of smokers at entryways of office buildings and in designated smoking zones within public plazas.

I undertook an inventory of some of the new security devices in this area and mapped them. I looked specifically at video surveillance, as well as at the distribution of razor-edged barbed wire, entryways with security guards or buzzer systems, perimeter fencing, elaborate wrought iron bars, and explicit signs that regulate access. (So much for the "City of Brotherly Love"). I walked up and down every street and alleyway within the study area, and marked observations on a base map. I did this in summer, 1994. Everything that I recorded, including surveillance cameras, was outdoors or under protecting roofs and plainly visible from the outdoors. After I started gathering data I got the idea that the distribution of outdoor public telephones might be another item for consideration. In particular, I noted phones that were secured against theft or vandalism by iron bars and special locks. Therefore, I retraced my steps and added this item to my original list of what to look.

At least initially, I tried to stay away from questions about whether all of this is protection good or bad, either for the city or in general. On the one hand, some people might argue that such security is beneficial, because it protects decent people from criminal elements; they might even argue that Philadelphia should have more of it. The opposite point of view is that there is too much of this security, and that it reflects a sad problem of unwarranted fear and mistrust among the city's people. Furthermore, such security is said to do very little of real value about the problem of urban crime. Moreover, it might also violate a person's privacy to be on camera unknowingly while using city streets and sidewalks. I think that having a hidden surveillance camera in a hotel elevator in relatively crime-free Tokyo is an unnecessary intrusion onto moments when people might think that they are alone. While Mike Davis makes it clear that he considers the surveillance cameras and other security devices that he observed in Los Angeles to be symbols of fear and oppression against the lower classes, I tried to reserve judgement until after I had made my own counts of these phenomena and seen what the map patterns as a whole looked like.

Findings

What did I find? First, I observed that far and away the most interesting patterns were those concerning surveillance cameras, rather than any of the other items that I counted. In part, this was because there were many more cameras than the other items. Therefore, I concentrated on surveillance cameras, and it is principally about them that I report below. I also report about public telephones. These too were quite numerous and exhibited interesting spatial patterns.

Table I shows the number of surveillance cameras in the study area by type of target. We see a total of 105 cameras, almost all of which were stationary as opposed to swivel-mounted and scanning a wide area. The cameras were aimed at a variety of targets, most notably parking lots, loading docks, entryways, and the sidewalks in front of or along side buildings. Because it was difficult to gauge exactly what some cameras were trained on most, and because some cameras seemed to be aimed at two kinds targets at once, I had to assign half values. For example, when one camera seemed to cover both the entry to a parking lot and a portion of the street in front, the categories "parking lot" and "street" each received credit for one-half camera.

We see that the single largest category, accounting for 29.0% of the total was parking lots. Most of the protected lots were the small private parking areas behind buildings, next to loading docks. Loading docks themselves accounted for 11.4% of the total, the majority of which was
accumulated by half values shared with adjacent parking lots. After parking lots, the second largest category was cameras at building entries (25.7%), followed by cameras than were aimed at sidewalks (19.0%). There were also a number of cameras (10; 9.5%) aimed at plazas, generally the public spaces in front of or adjacent to new office towers.

Table I:
Distribution of Surveillance Cameras by Type of Target
Center City West, Philadelphia
Summer, 1994

<table>
<thead>
<tr>
<th>Type of Target</th>
<th>number</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>parking lot</td>
<td>30.5</td>
<td>29.0</td>
</tr>
<tr>
<td>building entry</td>
<td>27</td>
<td>25.7</td>
</tr>
<tr>
<td>sidewalks</td>
<td>20</td>
<td>19.0</td>
</tr>
<tr>
<td>loading docks</td>
<td>12</td>
<td>11.4</td>
</tr>
<tr>
<td>plazas</td>
<td>10</td>
<td>9.5</td>
</tr>
<tr>
<td>street</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>105</strong></td>
<td><strong>100.0</strong></td>
</tr>
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<table>
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<tr>
<th>Type of Mounting</th>
<th>Number</th>
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<tbody>
<tr>
<td>Fixed-mounted</td>
<td>103 (98.1%)</td>
</tr>
<tr>
<td>Swivel-mounted</td>
<td>2 (1.9%)</td>
</tr>
</tbody>
</table>

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FORTRESS PHILADELPHIA

Figure 1 shows the geographical distribution of surveillance cameras in the study area. As far as is known, this is the first map of this phenomenon ever made, except perhaps for maps made by potential thieves. Each camera is represented by an arrow. The base of the arrow is approximately where the camera is mounted, and the point shows the direction in which the camera is aimed. (For the two moving cameras in the study area, the arrows identify the mid-point of the arc.) No attempt was made in this study to determine the range of individual cameras or their angles of view; therefore, all arrows are the same size. We see a wide distribution of cameras within the study area, as well as distinct clusters on particular blocks. The clustering reflects the fact that in many cases, a particular building had more than one surveillance camera, such as at entrances, at the loading dock, and perhaps at the entry to a parking ramp. This pattern is particularly true for the newest generation of high-rise buildings in downtown Philadelphia, almost all of which employ camera surveillance.

I found it interesting to compare these patterns with those for public telephones. Table II shows that of the 138 outdoor public telephones in the study area, 94 (68.1%) were secured with iron bars and/or special locks, and that 72 of the 138 phones (52.2%) were vandalized. Only 32 of the phones (23.2%) were neither vandalized nor specially protected. The map (Figure 2), also the first map of its kind, shows a concentration of outdoor phones in the southern half of the study area, an area that is more heavily given to retailing than other land uses. There are comparatively few such telephones in the blocks with the new high-rises, reflecting the fact that these buildings tend to have their public phones indoors. However, there is also a pattern that shows that the relatively few "non-hardened" and not vandalized phones tend to be concentrated in the area of office towers with video surveillance. Whether this is because of the surveillance or not, or more accurately because of differences in the kinds of people who use particular sections of the CBD, is not known. Other factors might be involved too. However, the differences in distribution patterns between Figures 1 and 2 are interesting, and suggest that video surveillance might, in fact, have an impact on at least some aspects of behavior.

Table II
Security and Vandalism of Outdoor Public Telephones
Center City West, Philadelphia
Summer, 1994

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>Total Number of Phones</td>
<td>138</td>
</tr>
<tr>
<td>&quot;Hardened&quot; against theft</td>
<td>94 (68.1%)</td>
</tr>
<tr>
<td>or vandalism</td>
<td></td>
</tr>
<tr>
<td>Vandalized</td>
<td>72 (52.2%)</td>
</tr>
</tbody>
</table>
SURVEILLANCE CAMERAS
CENTER CITY WEST, PHILADELPHIA, SUMMER 1994

New-Generation High-Rise
Plaza / Open Space
Surveillance camera and direction

Temple University Cartographic Lab
Discussion

Most of the 105 video surveillance cameras in Center City Philadelphia were aimed at parking lots, untended back doors, and loading docks, as well as at the main entryways of buildings. There was also video surveillance of some streets and sidewalks and several alleys. However, the amount of video surveillance is fairly small in comparison to the total area of Center City, and it is only a few of the many buildings in this district that have any cameras at all. As the data about vandalism of telephones suggest, it might well be that having such cameras in place is a deterrent to illegal activity. However, a definitive conclusion about this requires a much larger study than I have done here. In fact, I have not even looked at the literature on this topic, of which I am sure there a lot, if only in trade periodicals.

I have mixed feelings about the increase of video surveillance in Center City. On the one hand, I take a certain amount of comfort that there is stepped-up patrolling in the downtown, and can feel a little safer. Moreover, I certainly cannot blame businesses in the downtown for keeping an eye on their otherwise untended back doors via camera, or for protecting parking lots and loading docks in this way. There is certainly no violation of individuals’ rights to privacy when this is done. On the other hand, I also feel uncomfortable in knowing that and more more public space in Center City, such as sidewalks and public plazas, is under video surveillance, even if it does help to fight crime. One often gets a “big brother” feeling, especially around the newest office towers and hotels where cameras, both hidden and open, are seemingly everywhere.

In fact, at some places such as the lobbies of Liberty Place or a bank headquarters called Mellon Bank Center, the combination of video surveillance, uniformed guards, and posted signs about what not to do (“No Smoking”; “No Public Observation Facilities”; “Employees Only”) are intimidating, even for a middle-aged white male who might be expected to “blend in”. I get the feeling that every move is being watched, as if one were in an exclusive jewelry shop or the rare book room of a stuffy library. I can only imagine the increased scrutiny that is given in such places to casually dressed young people, especially African-Americans and Hispanics, or to people who look like they might be poor. Perhaps Mike Davis has a good point when he argues that the new urban form in yuppie-oriented downtown America is hostile to the poor and to minority groups, and that architecture is being used as an instrument of social control and oppression. It is a very complicated topic indeed, and deserves a full discussion, as Davis has started for us. It is also a topic that merits further research. If nothing else, it might be interesting to undertake a comparison in another city (or cities) of patterns that are evident in the new Philadelphia.

References
