1The Jaap Bakema Fellowship, a new annual award in support of research at the cutting edge of architecture, technology and society, is a joint initiative of the Netherlands Architecture Institute in Rotterdam and A10. In 2006, the first fellowship was awarded to Dutch architect Tim de Boer for his research into the effects of surveillance and control measures on public space. This article is a product of that research.

Maximum Security City

text: Tim de Boer

Any society that would give up a little liberty to gain a little security will deserve neither and lose both. – Benjamin Franklin

Technology is a queer thing. It brings you great gifts with one hand, and it stabs you in the back with the other. – C.P. Snow

Do we opt for the tough concrete barrier, the cast-iron baroque bench that can withstand the impact of a lorry, or do we engage a trendy office to design a stylized fence? Actually, it does not matter, it is just a question of style. As a direct consequence of the events of 9/11, high-risk buildings are being turned into fortresses. Walls, fences, posts and cordons sanitaires seal such buildings off from the surrounding area. In the process, valuable public space is lost. The concrete barriers are the most frequently mentioned examples of this fortification offensive. Still, the effects of these highly visible security measures are confined to the immediate vicinity; the interventions do not change society substantially and besides, they are reversible.

Anti-terrorism measures with no obvious visible consequences have a much greater impact on society. Such interventions are ubiquitous and of a permanent nature. Their purpose is to detect terrorists early on and to prevent attacks from taking place. They are coupled with increased powers for the state, allowing it to monitor people even before they have committed an indictable offence and to deny citizens the use of public space. These legal amendments are accompanied by the deployment of new technologies to detect, monitor and intervene. The role of public space shifts and its users are relegated to the status of consumers. This article describes these changes and argues in favour of finding solutions that strengthen the city.

Flashback

To put the current situation in perspective it is necessary to look at the relation between the city and the safety of its inhabitants. The city was originally invented in order to provide protection. The archetype is the walled city. The encircling walls made it almost impossible to capture the city, but there were other advantages, too, since walls work in two directions, shutting out but also shutting in. From a vantage point on top of the walls it was possible to keep watch on the surrounding area but also on the city's own inhabitants.

As weapon range increased, defence lines moved further and further away from the city core and walls ceased to be an adequate defensive response. The relation between the city and its defences grew progressively weaker as a result. After the invention of the atom bomb, the city once again became a prime target, now that a single attack could wipe out an entire city. The only solution in this situation was Mutual Assured Destruction (MAD) – if both parties had the capacity to destroy an enemy city in the event of an attack on one of their own cities, the chances of either party making a first strike were negligible. Since the weapons of retaliation had to be stationed as far from the city as possible in order to avoid destruction in a first strike, there was no longer any direct relationship between the city and its defences.

Today, more sophisticated weaponry and communications mean that a large army is no longer an advantage when waging war. Future warfare will not involve large pitched battles, but street fighting and terrorist-like incidents inside the city. The threat comes from individuals or loosely organized groups operating on one's own territory. If it is to protect its citizens, the state must once again direct its gaze inwards – at its own citizens, in other words.

Surveillance, Care or Control?

Surveillance is not new. In fact, it is as old as human society. Surveillance has two objectives: care and control. Every form of surveillance consists of elements that cater to both objectives. Initially, people trusted the gods to keep watch over them and to punish those who misbehaved. But gods were not always very reliable. Therefore, people took the protection of their property, themselves and the weaker members of society into their own hands. In present-day society we are always looking for ways of increasing the efficiency of our surveillance. Permanent electronic surveillance, in a variety of forms, has been steadily increasing since the 1980s. These technical devices are deployed to detect crimes while they are being carried out so that the forces of law and order can respond immediately. Surveillance also provides information that makes it easier to pursue and prosecute offenders and to trace accomplices after the event. Indeed, in the aftermath of the attacks in New York on 11 September 2001 and in London on 7 July 2005, intelligence services already succeeded in piecing together the final days of the perpetrators from financial records and security camera footage.

Until now, electronic surveillance has focused mainly on care. The new anti-terror measures are changing that. Surveillance is seen as a panacea for preventing new attacks. The hope is that by linking information from a lot of different sources it will be possible to identify terrorists before they strike, based on what is regarded as suspect or deviant behaviour. In order to facilitate this use of surveillance, carefully defined limits concerning privacy and civil liberties have been jettisoned. Everybody is in principle suspect and will be monitored. Once again we have put our trust in a higher power that promises to offer us protection. Not in the form of gods this time, but in the form of our own inventions: computers, algorithms and cameras. We have become a society of control.

Spatial consequences

Surveillance is being embedded in daily life. It is no longer possible to escape the watching eye without placing yourself outside modern society. Anonymity has ceased to exist in the modern city. How do these developments relate to the built environment?

The installation of surveillance devices in public spaces is barely noticeable. The additions are small and have no effect on our physical experience of the space. Research has shown that they don't have much impact on people's behaviour, either. So what does change? Small, unobtrusive things to start with. Gatherings are broken up, vagrants are quietly moved on and youths who hang around are politely requested to go and hang around somewhere else. It gradually becomes clear who the new boss is in the public space. You won't notice any of this as long as you behave yourself, but as soon as you display behaviour that is judged to be outside the norm, you will be monitored and perhaps even questioned about it.

Unfettered use of public space can no longer be taken for granted. In several European countries, including the United Kingdom and before long the Netherlands, this is even being formalized. In such countries it is now possible, without judicial intervention, to forbid citizens to be in certain areas or to behave in certain ways. These exclusion orders (Anti Social Behaviour Orders in the UK) are enforced with the help of surveillance technology.

The design of public space is gradually adjusting to these new realities. Small changes are made in order to discourage undesirable activities: benches are given extra armrests so that it is no longer possible to sleep on them; any obstructions to constant surveillance are removed; handrails are made skateboard-proof and low walls are topped with metal spikes so that no-one can sit on them.

At first such spatial changes seem to be fairly small and innocuous. In fact, they testify to a major change in thinking about public space. Public space is the scene of a constant tug-of-war between the state and its citizens. There is a delicate balance between what the citizen is able to do in this space and how much the state knows about these activities and what it will allow. Each introduction of new technology or new rules upsets this balance.

Round-the-clock electronic surveillance gives the state a huge advantage in this struggle. At present the state is not making full use of this advantage. But the information gathered by these means could also be used crack down on minor infringements and on what the state sees as socially undesirable activities.

The role of public space as part of the public domain is under threat. It is essential to this role that citizens are able to use public space anonymously. That it is a neutral place where everyone is welcome; where you can linger without having to justify yourself; where everyone is free to express their opinions without risk of possible prosecution. Public space that has been permeated by surveillance technology can no longer fulfil this role. Rem Koolhaas argued in 'The Generic City' (1994), that the public space of the future would be the atrium; a privately owned or policed space. Constant electronic surveillance is changing existing public space into something very like an atrium. Only the roof and the airconditioning are missing. In other words, public space that is under constant surveillance displays all the characteristics of an interior.

The dominance of security in architecture and public space is a recent development. Public buildings used to be designed as a part of the city. The extension of the Dutch parliament (Pi de Bruijn, 1981-1991) included a public passage where citizens could rub shoulders with politicians, but shortly after the extension was opened, this passage -designed as an atrium- was deemed too dangerous and was closed off.

Recent examples merely strengthen this impression: the Freedom Tower in New York (Daniel Libeskind and David Childs, 2006) is supposed to be a symbol of freedom and democracy. Yet, with an eye to the prospects of leasing out the building, the choice fell on a design in which security is the number one priority. The first sixty metres of the building above the lobby are reserved for technical installations and – at the developer's request – entirely of concrete. There are no windows lower than sixty metres. For the European Central Bank in Frankfurt (Coop Himmelb(l)au, 2004), a different strategy was applied: the 'matryoshka' approach, whereby the most vulnerable and vital section is surrounded by less important components, giving rise to a series of shells of diminishing security importance as one moves away from the core.

In both New York and Frankfurt, the strategies deployed mean that the buildings no longer have any direct contact with their surroundings. The lobby and car park are closed off, the facade is one continuous surface, there are no corners, no places to sit and certainly no parking spaces adjacent to the building. They are autonomous objects that turn away from the city. At most they form a backdrop for public space.

As these examples show, security is one of the most important themes in new design commissions. Architects engaged in designing new buildings and public spaces are reverting to concepts from the 1970s, like Oscar Newman's 'defensible space'. A design methodology is emerging based on the belief that smart design can deter criminality (and now also terrorism). Most importantly it concerns the clear demarcation of specific functions so that there are no longer any grey areas where there is uncertainty as to what is permitted there and who owns or manages them. There is no overlap between what is part of the building and what belongs to the city. Friction-free design, in short.

In *De capsulaire beschaving* (The Capsular Civilization) Lieven de Cauter describes such inner-directed spaces as capsules. Sometimes they take the form of controlled public space (with virtual walls, as it were), but they can also be inside buildings. Airports, gated communities and shopping malls are the precursors of these new developments. The emphasis on security leads to the radical encapsulation of society. Inside the capsules, the owner (commercial entities or the state) assume responsibility for our security. They equate security with predictability and so the unexpected and the abnormal are banished. This is increasingly done by electronic surveillance technology. The city is starting to look like a collection of mini theme parks; a collection of Disneylands where you, the user, are not allowed to decide how you want to use that space, and where the punishment for breaking the rules is exclusion. From a user and co-decider, you are reduced to a consumer and an object of surveillance. As citizens we have become the prisoners of our own desire for maximum security.

No reason to worry or hope for the best, just to look for new weapons – Gilles Deleuze

These developments have been made possible in part by the accelerated introduction of new technologies in the field of surveillance. They have skewed the relation between state, commerce and citizen. How can we restore this balance? How can we turn the city once more into a place that is more than the sum of individual capsules, buildings and users?

The city *is* more than that. The city is superior to other forms of human society precisely by virtue of that unpredictability, those unexpected possibilities. It is in such a place that new ideas develop.

... the informal steps in easily, a sudden twist or turn, a branching, and the unexpected happens – the edge of chance shows its face. Delight, surprise, ambiguity are typical responses; ideas clash in the informal and strange juxtapositions take place. Overlaps occur. Instead of regular, formally controlled measures, there are varying rhythms and wayward impulses. – Cecil Balmond, Informal, 2003

Could we perhaps use the new technologies to generate a similar situation in a society that is predicated on control? It is quite common for inventions that are initially available only to the state, to become available for commercial and civilian use. The Internet was invented to enable the army to maintain contact in the event of a nuclear war. The GPS system, too, had its origins in the military sphere; its purpose was to guide rockets to their targets. The Internet and the GPS system continue to fulfil their original military functions but at the same time they can be used by civilians for precisely the same purposes: communication and positioning.

The new technologies are barely present in a physical sense. They are extremely tiny, often invisible and sometimes even completely virtual. So how can they acquire a place in architecture? To answer this, we need to turn the question around. How can architecture play a role in surveillance? Surveillance is not just a matter of gathering information. The information flows have to be constantly monitored, processed, analysed and stored. This is architecture. They are all different programmes, each with their own requirements and thus with their own typologies. If we were to redefine these typologies, to recombine them and question their location and position in the city, they could come to occupy an important place in our society. A society in which technology is not just used to monitor spaces. Rather, a society in which it is also used to radically increase the possibilities the city has to offer. We have to stop staring at the concrete barriers, the bigger questions regarding security lie elsewhere.

Tim de Boer will give a lecture on this subject in the Netherlands Architecture Institute in Rotterdam (www.nai.nl) on 15 November 2007. For more information: www.maximumsecuritycity.org