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# Research and Development: Articles on Surveillance Technologies from “Green Anarchist”

Various Authors

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Where do we draw the line, is any compromise possible? There is no such thing as partial freedom only 'bigger prisons, longer chains'. To submit to self-discipline, to repress desire, to allow morality and mediation, is to embrace android culture. Self-surveillance and control is to submit to the logic of the technological panopticon and accept our ultimate domestication.

## Ubiquitous Id Tags on the Way

RFID chips are being embedded in everything. Though barcodes have been with us a while, and are an accepted part of civilised life, they are relatively new and originally encountered a lot of opposition. The patent for bar codes was issued in 1952. It took twenty years before a standard for bar codes was approved, but they still didn't catch on. Ten years later, only 15,000 suppliers were using bar codes. That changed in 1984. By 1987 — only three years later! — 75,000 suppliers were using bar codes. So what changed in 1984? Who, or what, caused the change? Wal-Mart.

When Wal-Mart talks, suppliers listen. So when Wal-Mart said that it wanted to use bar codes as a better way to manage inventory, bar codes became de rigeur. If you didn't use bar codes, you lost Wal-Mart's business. That's a death knell for most of their suppliers. Walmart at that time belonged to Sam Walton, who died in 1992. The combined wealth of his heirs is almost double that of Bill Gates. This was and is an extremely powerful family.

The same thing is happening today. Walmart are pushing the uptake of Radio Frequency ID (RFID) tags. Invented in 1969 and patented in 1973 RFID tags are essentially microchips. Some are only 1/3 of a millimeter across. They act as transponders (transmitters/responders), always listening for a radio signal sent by transceivers, or RFID readers. When a transponder receives a certain radio query, it responds by transmitting its unique ID code, perhaps a 128-bit number, back to the transceiver. Most RFID tags don't have batteries. Instead, they are powered by the radio signal that wakes them up and requests an answer. Visa is combining smart cards and RFID chips. These smart cards can also be incorpo-

rated into cell phones and other devices. Michelin, which manufactures 800,000 tires a day, is going to insert RFID tags into its tires. The tag will store a unique number for each tire, a number that will be associated with the car's VIN (Vehicle Identification Number).

The European Central Bank may embed RFID chips in the euro note. Ostensibly to combat counterfeiters and money-launderers, it would make it possible for 'governments' to track the passage of cash from individual to individual. Cash is the last truly anonymous way to buy and sell. With RFID tags, that anonymity would be gone. Incidentally, it is being speculated that the legalisation of cannabis will be a prerequisite to getting the mindless majority to accept the end of cash. Bear this in mind when you celebrate the inevitable 'victory'. Obviously tagging notes is not the preferred way to perform total surveillance of transfers.

Manufacturers and retailers getting involved include Gillette (which purchased 500 million RFID tags for its razors), Home Depot, The Gap, Proctor & Gamble, Prada, Target, Tesco, and Wal-Mart. Especially Wal-Mart. Others are talking about placing RFID tags into all sensitive or important documents. In other words, those documents you're required to have, that you aren't allowed to live without, will be forever tagged.

Applied Digital Solutions has designed an RFID tag — called the VeriChip — for people. Only 11 mm long, it is designed to go under the skin, where it can be read from four feet away (with current technology). They sell it as a great way to keep track of children and anyone with a medical disability, but it can be used on anyone, anywhere. In May, delegates to the Chinese Communist Party Congress were required to wear an RFID-equipped badge at all times so their movements could be tracked and recorded.

Surveillance is getting easier, cheaper, smaller, and ubiquitous. You could remove the chip from your jeans, but you'd have to find it first. More menacing is the possibility of all the chips you don't know about. Major changes are coming. The law of unintended(?) consequences is about to encounter surveillance devices smaller

have done challenged or slowed the tightening of the noose in any way? Surely we have just become more and more subsumed into the system on all levels — do we even understand any more what we are fighting. Are we through our acceptance of our socialisation, our morality, our self-surveillance, active accomplices in our imprisonment, destined never to create the space to become ourselves? There is a long anti-civilisation insurrectionary history — pirates, slave revolts, luddites... People could remember that there used to be other ways of being, and knew almost instinctively what the enemy was. Yet we appear to have lost meaningful class analysis — allowing it to be subsumed even in the 'anarchist' world into unions, federations, and working class fetishism. Accepting post-enlightenment ideas of progress, with the dualistic morality that this entails, thus attempting to fight the system from within the confines of its thought control. This is not embracing freedom and can only be disastrous, it is superficial as opposed to fundamental change — the illusion of freedom whilst subject to the bureaucratic morality of the mass.

'It is to the way in which we can come together to transcend the environment of the technology of isolation that we must apply our efforts and attention. How we organise to this end is organic; it will be neither formal nor permanent, and it cannot be programmed or platformed. We start by communicating on equal terms — without the mediation of technology, specialism and representation — with those who suffer the same alienated existence. We grow stronger as likeminded people work together seriously (and playfully) in common projects of self-determination that shatter established social relations. 'The heart of the State' is found and demolished in our own relations. Let your desire be armed'. (Test Card F).

free yourself in order to experience freedom. Within the present social order, time and space prevent experimentation of freedom because they suffocate the freedom to experiment' (At Daggers Drawn).

Within the anarchist milieu there is the general acceptance that we are aware of surveillance, we know about Echelon, and CCTV — we take care where we talk about what, we fight Big Brother where we can etc. But this is only the outward form of surveillance; rarely do we seem to look at the way the self-discipline of surveillance morality has crept into our own sub-cultures. Which rules are questioned, and how are ideas about morality and deviance defined and enforced within our groups?

We also seem to have accepted the comfort zone of sub-cultural permanence — housing coops, social centres, activist groups — these are hung onto no matter how destructive, no matter how domesticated because of not wanting to waste the work put in — thus we perceive work as a means to an end, rather than an enjoyable, satisfying activity in itself. Yet surely it is the working together on a project that is most important — and learning, and communicating — not whether the outcome of the project is 'positive' or 'negative'. We hang onto groups because they have worked in the past, allowing roles to become cemented, knowledge to become protected — a creeping specialisation, which negates the possibility of spontaneity. We create spaces that are different in that wider morality becomes skewed, but remain tainted by civilisation.

How much are we creating spaces for ourselves that allow us to 'survive', but prevent us from truly living. Surviving on the detritus of capitalism is still dependency on it. Have we become civilisations scavengers rather than its parasites? Surely we are just as dependent as if we were actually participating. The opposition that legitimises the status quo.

How are we developing a revolutionary praxis? Are we even pushing ourselves to question what we have been taught. Over the last ten years there has been much activity, but has anything we

than the full-stop at the end of this sentence. The wet dreams of tyrants throughout the ages are about to become real.

## Terror Excuse for ID Cards

The ‘terrorist threat’ to the UK will lead to ID cards being introduced “more quickly than even we anticipated”, according to ‘Prime Minister’ Tony Blair. Comments at his monthly briefing to journalists follow on from the “route map” to ID cards unveiled by the UK Passport Service in March.

“I think that the whole issue of identity cards that a few years ago were not on anyone’s agenda are very much on the political agenda here, probably more quickly even than we anticipated, and that is because we are living in a new world and with a new threat that we have to take account of,” he said.

It means the Cabinet’s deal to delay the introduction of ID cards seems to have been thrown out of the window and that Blunkett will be given the go-ahead to fast-track the project. Blair also claimed the current climate had lessened privacy concerns and that there “is no longer a civil liberties objection”.

Obviously there *are* objections, and both sides will argue about this till the cows come home, but what isn’t being debated is the fact that the vast majority of security experts maintain that cards will do nothing to enhance security, because every system so far invented (and thus any system the ‘government’ chooses) can be easily breached by even those with modest assets, for example by forging or stealing and altering cards. If they won’t work, what are they for?

The conclusion is hard to avoid: ID cards are for surveillance of the population as a whole, not to prevent terrorism. Together with RFID, face recognition and all the other hi-tech ‘solutions’ being

‘If the discourse is one-way, no communication is possible. If someone has the power to impose the questions, the content of the latter will be directly functional to this (and the answers will contain subjection). Subjects can only be asked questions whose answers confirm their roles as such, and from which the bosses will draw the questions of the future. The slavery lies in continuing to reply’ (At Daggers Drawn).

This is relevant in all areas of life, for example the post WW2 welfare programmes are generally accepted as at least benevolent, yet they have only served to increase the intensity of our control.

Slum clearance led to a loss of communal space and activity, an increased reliance on the nuclear family, the isolation of women within the home, a loss of the living kitchen and its replacement with the mediated environment of the ‘living room’. We accept losing autonomy in order to receive wealth or health benefits, we have become desensitized to being numbered and tracked. Given the loss of public / collective space, where are the places to fight from the outside, ‘how can you think freely in the shadow of a church?’

The domination of socialisation is hard to resist, it is something we are immersed in and absorb continuously, we do not feel coerced, it is everywhere and nowhere. Thus is not just relevant to us at adults. Many people seem to have the idea that it is wrong to educate kids outside of mainstream education; considering this bourgeois and somehow reducing their future choice!

We have chosen not to participate, and it is felt unfair not to give them the option to opt in — this shows a massive lack of understanding of basic socialisation, and of the methodology of control. Self-surveillance is learned from childhood. Children no longer have the freedom even to play unobserved, to explore their sexuality, to create their own spaces. Instead they grow up expecting to be watched, to be protected, to be dependant, to be fearful. ‘You need to experience freedom in order to be free. You need to



further domestication in return for ‘protection’. In Perlman’s words ‘The task of capitalist ideology is to maintain the veil which keeps people from seeing that their own activities reproduce the form of their daily life; the task of critical theory is to unveil the activities of daily life, to render them transparent, to make the reproduction of the social form of capitalist activity visible within the people’s daily activities’.

Obviously an important technique of control is that of the media, not only that advertisers attempt to repackage our desires within the symbolism of consumer goods, so that through their purchase we can construct a physical, visual narrative of our lives. More fundamentally the media offers a closed discourse with the central issues never up for discussion.

The loss of two-way communication at community and societal levels is indicative of the destruction of spatially conscious communities. Individuals are linked into something much less tangible, thus we can feel a sense of intimacy with public figures whom we have never seen, let alone met. Trust experts and opinion polls, yet we are subject to whipped up fears about our neighbours. This process, particularly the induced fear, facilitates the technological panopticon. Allowing tightening of its ability to regulate movement and control our actions – to prevent us from acting on our desires, or at least perverting our desires, trapping us into the reproduction of capital.

Additionally, when all others in a space are behaving ‘appropriately’, the undomesticated body becomes marked and available to the attention of surveillance systems. Residents of cities are treated like tourists, welcome to spectate and consume, but not to act on their own. Local residents cannot appropriate a domesticated space; it has already been reduced to a single meaning. Unmediated conversation with those around you might just break the fear, you might discover that you have been lied to, you might just begin to live.

introduced simultaneously, we are not far from Henry Kissinger’s dream of being able to monitor every individual at all times.

Of course “If you’re innocent you should have nothing to hide.” Tell that to the people who ticked the “Jewish” box in the Dutch census in the early 1930s.

Their government at the time could be trusted with that information. But when Hitler invaded, the Nazis had access to all those records and could use them for their own purposes.

## Marvels of Technology: The ID Sniper rifle TM

The ID SNIPER(TM) rifle is used to implant a GPS-microchip in the body of a human being, using a high powered sniper rifle as the long distance injector.

The microchip will enter the body and stay there, causing no internal damage, and only a very small amount of physical pain to the target. It will feel like a mosquito-bite lasting a fraction of a second.

At the same time a digital camcorder with a zoom-lens fitted within the scope will take a high-resolution picture of the target. This picture will be stored on a memory card for later image-analysis.

As the urban battlefield grows more complex and intense, new ways of managing and controlling crowds are needed. The attention of the media changes the rules of the game. Sometimes it is difficult to engage the enemy in the streets without causing damage to the all important image of the state. Instead EMPIRE NORTH suggests to mark and identify a suspicious subject on a safe distance, enabling the national law enforcement agency to keep track on the target through a satellite in the weeks to come. [manufacturer's description]

The ID SNIPER(TM) rifle was presented by Empire North in Beijing at the China Police 2002 exhibition.

## How Can You Think Freely in the Shadow of a Church? *by Grimalkin*

Dominant discourses lead us to believe that we are living the best life that there has ever been; at all other times in all other places things were nasty, brutish and short. You may be bored shitless — but then there must be something wrong with you — work harder, drink, take Prozac, take up a cause... But this luxurious life is fragile, and others are jealous, they are not prepared to work for it like you do, they just want to take it, and send you to the place they are now.

You must be on your guard at all times. Have a 'cop in your head', invite the Internet spy into your home, nowhere is safe, carry your mobile phone, do not rely on yourself, the benevolent god of technology is there to help. You are domesticated, you are dependant — you don't want to go taking action yourself now do you — report it to the experts... they are to be trusted.

In a 'democratic' society where authority is legitimated in an inverse relation to its exercise, domestication must be enforced through 'voluntary' compliance, through self-discipline. Domestication is achieved by allowing 'difference' but annihilating any autonomy through a divide and rule system. Related to this is Gramsci's concept of hegemony — the idea that no state or social structure can exist for anything but a brief time by coercion alone.

Surveillance exists to enforce ideas of normality and deviance — of morality; this universalising morality produces docility. Surveillance acts to exacerbate fear of the other, leading us to accept our

move their eyes and antennae. But they look nicer when you put a little circuit on their backs, and remove their wings.”

## New York Surveillance Camera Players — Live at Leeds

Between 7 and 11 October 2003, Bill Brown of the New York Surveillance Camera Players stayed in Leeds, England, as the guest of the Evolution 2003 Arts Festival, an offshoot of the Leeds Film Festival.

On Tuesday 7 October, after arriving in Leeds and checking into his awful hotel (the newly built Park Plaza), Bill mapped out the locations of surveillance cameras installed in public places in the city centre. As the final version of his map indicates, this rather small, densely packed area is watched by a total of (at least) 153 cameras: 115 installed on the exteriors of privately owned buildings, and most likely operated by private security guards; 22 hidden within uncommonly large, black-tinted globes, and most likely operated by the police; and 16 installed atop poles, and definitely operated by the City Council.

In other words, the Leeds city centre is a *super-surveilled* place, one in which it is impossible to walk around without being videotaped, no matter where you go. The city centre occupies 16 square blocks; and so there are, on average, almost 10 cameras per block. By contrast, there are only 7 cameras per city block in the most highly surveilled neighborhoods in New York City and Chicago, which are of course *much* larger cities. With Leeds in mind, it's easy to believe the accuracy of the estimate that England as a whole is watched by over 2 million surveillance cameras.

The situation fairly boggles the mind. The police cameras installed on top of poles aren't enclosed within globes, as they are

in New York City. As a result, all of their grotesque movements — sweeping back and forth, stopping to watch someone in particular, following someone around, etc. — are clearly visible to everyone. Though these cameras are almost always accompanied by signs, these signs contain a glaring mistake: they say “CCTV [Closed-Circuit TV] in Operation,” when the cameras these signs accompany are in fact wireless or OCTV [Open-Circuit TV]. The police cameras that are enclosed, are enclosed within globes larger than any Bill has ever seen. Furthermore, these huge black globes are never accompanied by signs, which makes their dark presence on poles and the exteriors of certain buildings even more menacing. As if all this wasn’t enough (!), the police also use highly visible Video Vans, which mostly cruise around at night and are probably equipped with infrared cameras.

It’s worth noting that, almost without exception, each privately operated surveillance camera in Leeds has a small sign on it that proclaims the name of the company that manufactured it. And so, every time one sees a camera, one also sees the name of a company (ADT, Secom, Philips, Symantec, Securicor, etc etc). It’s a form of advertising. This clearly suggests that, not only are surveillance cameras designed to create an environment in which it is safe to do business, surveillance cameras are themselves a (big) business.

On Thursday 9 October, Bill was quite busy. At 11:15 am, he gave an hour-long presentation about the SCP to an “Evolution” audience. More than 100 people were in attendance. There were a great many questions; but, this time, about half of them were “pragmatic” in nature (i.e., less questions than thinly disguised objections). One woman had the nerve to ask if Bill had ever been the victim of crime; another said she was “disturbed” by the fact he was wearing a suit and tie, and not dressed the way she imagined people like Bill should be dressed.

And yet, immediately after his presentation, when Bill offered a walking tour of surveillance cameras in the city centre, there were in attendance over 50 people, all of whom were clearly supportive

## Low-Life Researchers

“Insects can do many things that people can’t,” Professor Isao Shimoyama told a press conference in Tokyo, “such as being able to lift hundreds of times their own weight. The placement of the electrodes is still a very inexact science, but within a few years we’ll have electronically-controlled insects carrying colour minicams with surroundsound stereo microphones, and equipped with hitech backpacks. The potential applications of this work for mankind could be immense.”

In a speech reminiscent of the blather about radio ID tags being used to help rescue lost old ladies and kidnapped children, Shimoyama was ‘explaining’ to the terminally stupid why the Japanese government had just awarded a \$5,000,000 grant to his bio-robot research team at Tokyo University.

“We envisage insects crawling through earthquake rubble searching for victims, or being slipped under doors on espionage surveillance, in suspect restaurants for example.

At present, we’re experimenting with the American cockroach. We remove the wings and antennae, then equip them with tiny microprocessors, and fit pulse-emitting electrodes where the antennae used to be. That way, researchers can control them remotely by sending signals to the backpacks, making them turn left or right, scamper forward, or spring backward. The technology isn’t so difficult. The real problem is understanding what’s happening in the nervous system.”

Raphael Holzer, a Swiss researcher on the team, added: “We breed them by the hundreds in plastic bins, and they are not nice insects. They stink, and there’s something nasty about the way they

such questions. Nor will we be able to do so by placing our trust in the information arising from the scientific world since one of its current prerogatives is to openly make people accept the new technological applications of scientific research. In reality, its transparent information merely communicates decisions to us that have already been made in our names and over our heads and discloses the results of research that has already been carried out.

Who knows if in the case of nanobiotechnology, as already happened with biotechnology, those who claim to oppose it will once again venture into demands for regulation, precautionary rules, independent structures of control.

Then the story will end just as it did for biotechnology: a minimal opposition to applications related to food with arguments easily recuperable (and recuperated) by a part of the scientific clique, with transgenic food that already makes part of our daily diet. No opposition at all to medical biotechnology that is rather looked upon by all as a great opportunity for sick people.

And these things are really what the entire apparatus that has everything to gain from biotechnology focuses on: no more debate on GMOs in the dietary field, no more alarmism, no more news, despite the fact that there are still people who want to struggle, opposing the harm with the only possible solution: destruction.

And so it will happen in the field of nano-biotechnology. As soon as it is talked about and the scenarios are made increasingly clear, the sterile opposition will raise on oppositional voice about the dangers inherent in those projects that are most open to question such as those in the dietary or military fields. Nothing more.

What to do? If Kevin Warwick is right, then we will stock up well on bananas, because we will certainly be among those who form the chimpanzees of the future. But it is known, even a well-known film teaches us, when chimpanzees get pissed off...

[from Terra Selvaggia #13 , summer 2003]

of Bill's unrelenting critique of surveillance, police departments and the State. The group didn't have to walk far to see the three types of cameras Bill had mapped. Indeed, the group didn't have to do any walking at all; all it had to do was stand still at the northeast corner of Albion and the Headrow, a spot from which the group could see — and be seen by — all three camera-types.

Bill had expected that there would be problems with the police. Before departing for Leeds, he'd been contacted by a reporter for The Guardian, who'd told him that the Leeds City Council — one of the sponsors of the event — had already expressed discomfort with the proposed walking tour. In particular, the Council was uncomfortable with the reference to "the conditions under which the cameras do not work" in Bill's description of what the proposed walking tour would highlight. This clearly suggests that the Council is experiencing problems with its system, and doesn't want this fact publicized, or that the Council is all-too-aware that its system can easily be interfered with. In any event, there were no problems at all. The police simply used the nearest pole-mounted OCTV camera (it was right across the street) to keep a careful "eye" on the walking tour the entire time it was taking place.

There was sufficient interest for a second walking tour, which took place at 5:30 pm. Meeting at the same spot as before, this tour was attended by about 10 people, all of whom had been at the first one. And so, rather than offer the same program a second time, Bill moved on to other, more advanced subjects (automated surveillance, targeted assassinations, and UAVs). As before, the group was obviously being watched by the OCTV camera across the street.

Once he'd concluded his remarks and answered people's questions, Bill led the group around the corner and into heavily surveilled Dortmund Square. After explaining what he was about to do and inviting others to join him, Bill began performing God's Eyes Here on Earth in front of one of the pole-mounted police cameras. He was joined by 6 other people, including a homeless man who "prayed" to the camera by making an internationally recog-

nized gesture for fuckyou. When the watcher turned the camera away and pointed it in the opposite direction — as if refusing to give the performers the satisfaction of knowing that their gestures had been seen — the group picked up, moved to the spot in which the camera was looking, and started the performance again. Once again, the camera turned away and refused to look. Success was declared, and the group went off to find a pub.

[www.notbored.org/the-scp.html](http://www.notbored.org/the-scp.html)

We might, indeed, be the last generation of human beings lacking technological prostheses at birth.

The great importance of nanobiotechnology for the economic and institutional world is shown by the huge appropriation of funds by the American government, which invests between 600 and 700 million dollars a year in the development of the sector. Furthermore, in Europe there is enormous financing for research projects or centers dedicated to the development of nanotechnology. The case of Grenoble is revealing. It is the French town considered to be the European capital of technological development, where some projects financed by the European Union benefit from funds of hundreds of millions of Euros. Among these is Minattec, considered the European project capable of competing with the largest Japanese and American rivals, originating in the efforts of the EU and multinationals like Philips, Motorola and STMicroelectronics.

In past years, science fiction has entertained us with stories about replicants capable of multiplying autonomously and in great numbers until they conquer the earth. This is also the fear many experts feel about nano-biotechnology, that some artificially constructed living organism could escape the controls of science and live, multiplying itself beyond measure (a fear that is concretely verified for the products of genetic manipulation).

But as always, every fear, and not just those that are most absurd, is set aside in the name of progress to the benefit of humanity. Furthermore, the world of science has always been defended by maintaining that the misdeeds of techno-science are due to the bad uses that have been made of the knowledge; by maintaining, as always, that technology is neutral, just as those who, with their studies of nuclear science, then fully contributed to the bombs that fell on Hiroshima and Nagasaki, to the tragedies of nuclear accidents and to the proliferation of armaments, were quick to say. It is certainly not by allowing the usual experts from the same academic-political world the only say in the matter that we will be able to resolve

where the person ‘wearing’ it is at all times (one can even buy it on the Internet if one wants to know it up close). The Verichip can be injected with a syringe, using a simple local anesthetic. It is sold as an electronic bodyguard for preventing abductions, so that already many multi-millionaires are requesting it. But an intuition easily develops that soon such a chip will not be an optional convenience for the rich, but rather a heavy burden for the poor. At the beginning, they extol the humanitarian aspects of such instruments, mentioning that in some cases they will be of use to doctors for intervening quickly or to police for preventing abductions and violence. Then applications on increasingly larger portions of the population will be justified until the day in which we cannot live without it. On that day the chip implant will be obligatory and getting rid of it will be a serious offense.

Finally, the chips that the British government proposes for implanting in pedophiles who are already sentenced are the latest frontier. Besides registering the position of the one under surveillance, these chips will register the heartbeat and arterial tension, giving a warning about the imminence of an eventual act of violence. It will not signal a state of sexual arousal, but nervousness and fear. The same nervousness and fear that a thief or a saboteur might feel while at work. Besides, one should not consider the pedophilia alarm, with which the media has been bombarding us for years in a way that is hugely disproportionate to the reality of things, to be incidental to the project of social control.

By maneuvering collective hysteria in this way, children increasingly become the objects of state property, and thus their protection becomes an obligation to carry out. This doesn’t merely justify chip implants in pedophiles, but also the proposal of experts and parents’ associations to chip all the children in England after the latest extraordinary case of Holly and Jessica, raped and murdered in 2002. But who will protect these children from the penetrating eye of their parents and the state? Who will protect them from the inescapable network of technological control?

## “I Can See the Future”: 10 predictions concerning cell-phones

“My guess is that the real revolution in law enforcement capability will come from digital radios, rather than from video cameras.” — Arnold Kling, 21 October 2002.

Unlike the grainy pictures taken by today’s picture phones, the Nokia Observation Camera snaps high-resolution images of 640 by 480 pixels. This means it rates as a surveillance system under British and European law, so people buying one will have to register with the data protection authorities as a CCTV user, says Britain’s Office of the Information Commissioner. “If this device captures an identifiable image, it will be classed as a CCTV device,” says the office’s compliance manager Fay Spencer. “Anyone who is not exempt will have to register as a CCTV user.” Under the act, anyone can ask a registered user to see what they have recorded. Watching your car in your drive or on the street outside your home would be exempt. But watching other people, their homes or cars would not. “The guiding principle is fairness, telling people how the camera is being used and why. That’s why shops have notices warning customers that they are on camera,” says Spencer.

1. In place of the video surveillance cameras currently installed on the exteriors of buildings, on city-owned poles and in

other public places, the security industry will instead install cellular telephones (“digital radios”). Unlike video cameras, even those that are outfitted with transmitters, so-called “cell-phones” are fully integrated, multi-purpose devices. They can be outfitted with tiny digital cameras that can take high-quality stills or moving pictures, can be controlled by remote units, and can transmit images to far-away locations almost immediately after taking them.

2. All cell-phones will come with two types of built-in surveillance/tracking devices: transponders that communicate with the US military’s semicommercialized system, and radio frequency identification (RFID) tags. These devices will allow both the military government and the private sector to identify the precise location and track the exact movements of each and every cell-phone user, no matter where they go.
3. Cell-phone users will be actively encouraged use their cute little cellphones to surreptitiously take pictures of people who look “suspicious” and then send these pictures to the local police and/or the FBI, who will use computers to see if they match any of the pictures that are stored in their huge and always-growing databases. Winners in this game of snitch will be financially rewarded and turned into “heroes” by the media (see #5 below).
4. Sexually repressed and ethically corrupt people — American males — will use their cell-phones to take “up the skirt” shots et al of girls and women who don’t know and in such a despicable fashion. This will quickly become a real problem, much worse than it is now: cell-phones already take better pictures than most video cameras; cell-phones get rid of the evidence (send it somewhere else), rather than storing it where it can easily be found; unlike video cameras, cell-phones don’t require disguises or excuses to be brought into such sensitive

any object in the market, from scales to clothes to pens all the way to nutritional mixtures capable of communicating with the refrigerator.

But this final application foreseen for these microchips is not certain, and it is not the first time that behind the humanitarian pretenses or the miraculous improvement of the average lifestyle there is quite a different project hidden, carefully concealed from most of us. This is the case for the most disturbing applications of nanotechnology, such as the humanmachine link or the application of subcutaneous microchips, which use as their excuse the combination of the curing of rare diseases and the protection of poor, defenseless citizens from brutal criminals.

In fact, the field I which nanotechnology is most developed is that which is linked to military studies. The scenarios that the media showed during the last war in Iraq already pointed to the finalization of ‘intelligent’ equipment capable of adapting itself to internal and external conditions and weaponry that was also endowed with extraordinary powers conferred by sensors, microchips and so on.

An obvious example is that of the MEMS (micro-electrical-mechanical systems), the first generation of nanomachines. These are miniature receivers and motors the size of a grain of dust, the proto-types of which are already coming into use in industry. The application currently being studied is that of surveillance powder that will be sprayed onto a battlefield or into an area under observation in order to get various types of information. The future of the robotics of war is increasingly that of versatile and low-priced microand nano-robots used as highly specialized weapons.

In the wake of these studies another important aspect is that of social control. A chip the size of a grain of rice that is meant to be inserted under the skin has been put on the market by the American company Applied Digital Solutions. It is called the Verichip and is capable of containing information about the person and can be endowed with GPS capabilities that would allow knowledge of



now. For example, the enterprises that deal with nanotechnology have tested new products such as stainproof fabrics, self-cleaning windows, cement with special characteristics, anti-pollutants for diesel, etc.

As absurd as it may seem, nanotechnology has the pretension of making new products by constructing them atom by atom. For example, it has the ridiculous idea of replacing food with an ensemble of atoms that could be transformed into wine or whiskey or orange drink, depending on the need of the consumer, 'simply' by triggering off a determined reaction.

The enthusiastic supporters of nanotechnology have thought that ultimately if one reaches the point of manipulating matter in its most basic component, the atom, why not mix biotechnological studies of the biomolecular world with the precisely with the research on atoms? Thus, nano-biotechnology is born. No longer satisfied with creating new apparently static products starting from atomic technology, instead by blending it with the technology of life, it aims for the creation of new products where the boundaries between living and non-living beings are erased. For example? Self-cleaning plastics in which enzymes feed on the dirt, airplane wings full of proteins (if the wing breaks, proteins that function as adhesives are released repairing it), ultra-fast computers with circuits based on a 'framework' of DNA, electric conductors of dimensions on a nano scale in a protein base, i.e., the 'living plastic' built on a genetically manipulated bacterium capable of producing an enzyme that can polymerize according to scientists.

But the applications unfurled before the great public are just shoddy goods, useless innovations to satisfy infantile desires generated by technology in the 'consumer'. And, in fact, the applications described above for the manipulation of matter turn out to be just the tiniest part of the results sought in current research projects. The miniaturization of information processors is concealed within these worthless gadgets, and this is of some importance. This miniaturization will lead to the presence of 'intelligent' microchips on

areas as schools, gyms, locker rooms, bathrooms, beaches, etc.

5. Reality TV shows a la Big Brother will accentuate the "novelty" of having a group of people cooped up together in a single place for a long time and watched by hidden cellphones, not hidden video cameras.
6. As cell-phones become increasingly relied upon to provide a wide range of services (telephone calls, text-messaging, pictures, video games, Internet connection, personal digital assistance, etc.), they will become increasingly attractive to thieves, who will see the value of both the device itself and the information (the "identity") contained within. To guard against both kinds of theft, all cell-phone users will have to prove that they are indeed who they say they are (the rightful owners) before they can use their own phones.
7. The most popular method of authentication ("logging on") won't be typing in a 7-digit password (hard to remember) or placing a digit on a device that can read and remember fingerprints (too reminiscent of what the police do to bad people when they arrest them); no, it will be letting the cute little cell-phone take a picture. This picture (of the user's face or eyeballs) will be analyzed by the cellphone, which either won't find a match ("Please try again") or will find a match and only then allow access ("You've got mail!").
8. It's possible that a user who fails to log on after 3 tries may find that his or her service has been temporarily suspended while the service provider tries to "determine the nature of the problem." Is it incompetence on the part of an legitimate user, or the result of deliberate actions by an illegitimate user? Because "an illegitimate user" might be a criminal (thief) or a terrorist (Osama Bin Laden, Saddam Hussein

or someone else on the Bush Administration's "missing persons" list), every single attempt to log-on to a cell-phone will – using the very same system described in #3 (above) – be "monitored" by Verizon/AOL-Time Warner/the FBI/theCIA.

9. The Israeli Defense Forces have already shown that alleged terrorists – whether they are legitimately using their own cell-phones or are using others' phones illegitimately – can be assassinated from a safe, faraway distance by systems which place calls to the alleged terrorists' private telephone numbers and then fire air-to-ground missiles at the locations provided by the alleged terrorists' very own cell-phones, that is, if they are unlucky enough to answer or "pick up." It's only a matter of time before the same system is used by the United States government, which has already used it to summarily execute suspected "terrorists" in Yemen from a safe, far-away distance.
10. Ownership of a cell-phone will be mandatory. A free cell-phone will be given to each and every person, starting at birth.

– Surveillance Camera Players, 21 June 2003.

## The Nano-Nightmare

from *Terra Selvaggia*

Those who remain as pure humans and refuse to improve themselves will have a serious handicap. They will constitute a subspecies and be the chimpanzees of the future.

– Kevin Warwick, technophile with multiple subcutaneous chips

As in a game, a macabre game, technology has been pushed to the manipulation of matter on the scale of a nano-meter, i.e., the millionth part of a millimeter. What is manipulated is something that shades off into the boundaries between the non-living and the living: the atom.

This technology, called nanotechnology, creates new 'products' actually starting from the manipulation of atoms, subatomic particles and molecules. Unlike biotechnology that manipulates the structure of DNA, creating organisms through the recombination of genes, nanotechnology 'breaks down' matter transforming it into atoms with the possibility of artificially synthesizing them and thus of creating something material from nothing (atom by atom). At the moment, attention is focused on carbon atoms, the skeleton of matter, but soon it could be extended to other elements. In short, scientists would like to control the elements of the Periodic Table at will; according to science, this would allow combining the characteristics of a product (such as color, resistance, melting point) in a manner completely different from what has been possible up to