THE TECHNOLOGY OF CONTROL: 
THE ROLE OF TECHNICAL DEVELOPMENT IN 
EXERCISING SOCIAL CONTROL

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ABSTRACT

The ‘risk society’ is characterized by the search for the external (i.e. reassuring) forms of security, and to handle the citizens’ crime-related fears became a high-priority criminal policy issue. The intention to moderate crime-related fears the criminal policy has crossed its competence borders both “upwards” and “downwards” and blurs the responsibilities of police forces, national defense and social services. The field of crime control (e.g. war on terrorism, execution of sanctions) proved to be an excellent site for the development of high technologies, as well as in the security industry and property protection. The crime prevention scene with several players generates conflicts as well, as it also blurs the borders of “public” and “private”. New means of control yields higher-level production, brings up a number of information, but heightens producing the dangers concerning the competences of criminal law and human rights.

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In David Garland’s opinion, it would not be possible to handle threats without providing security and rules, or exercising control but we would not be able to utilize our opportunities either. By now, however, the requirement of security gained key importance both in the United Kingdom and in the United States of America, says Garland in his book published in 2001.1 A “risk society”2 operates on the basis of principles that differ from those of earlier societies. It is a new approach to the recognition and handling of risks is unfolding. The disharmony in the modernity of the 21st century first became tangible in the area of road transport when, besides the technical advantages provided by motorization, some less favorable consequences such as the increase in the number of deaths caused by road accidents, or environmental damages, also surfaced.3 The situation is that the acceleration of technical development does not only involve higher standard production but it also means the multiplication of threats. Ericson and Haggerty worked out a new model that foregrounds the knowledge work dimension of the police and its

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potential to serve the interests of nonpolice social-disciplinary institutions.\textsuperscript{4} The separation of actual security and the feeling of security can also be noticed in road transport first.\textsuperscript{5} Last twenty years, countless questionnaire-based surveys conducted among the population have proven that the citizens’ assumptions of crime reflect similar attitudes: there is an increase in crime-related fears even when the number of crimes stagnates or decreases. A criminal policy built on the lack of security “uses and misuses” people’s crime-related fears. This is well indicated by the “what if” approach, which, in government policy, means that governments prepare themselves for the worst possible scenario as if the probability of its occurrence were one hundred percent. David Crawford thinks that in this approach, the facts and the related assessments of threats are separated from each other. All this leads to the development of new needs for, and forms of data collection.\textsuperscript{6}

\textbf{The limits of the competence of criminal policy}

Thus, the handling of the citizens’ crime-related fears became a high-priority criminal policy issue in the European countries as well. Paradoxically, however, the intention to moderate crime-related fears has become linked to the generation of other fears. As has also been pointed out by Hörnqvist, this situation was the consequence of the two-way development of criminal policy, which crossed its competence borders both “upwards” and “downwards”.\textsuperscript{7} As a result of the “occupation of territories”, a broad space where the state and the NGO’s can cooperate has developed and coercion can be used on the basis of such principles which are not regulated by law.

a. By the “upwards” occupation of territories, for example, by fighting against terrorism or even more, by the way that this phenomenon is interpreted by the governments of the developed countries, it is the borders between ‘war’ and ‘crime’ that fade away. The situation is that terrorism is not a war, it is also different from grave crimes, since there are political-ideological intentions and interests in the background. At the same time, however, the struggle against it, which is signified by the word ‘war’ in the political terminology, (which is perhaps not a coincidence), blurs the responsibilities of law enforcement and national defense. It implies regular state emergencies, as if this was a traditional war, and it applies tools of restraint and constraint to an extraordinary extent.

b. As regards the “downwards” occupation of criminal policy, local crime prevention and zero tolerance seem to be good examples. The thing is that this blurs the border between responding to crime and reacting to undesirable or uncivilized forms of behavior and through this, the borders between the competence of the police forces and that of social services become uncertain. The use of the data in criminal records in an increasingly broader scope is an example for the same.

\begin{itemize}
\item \textsuperscript{6} Lecture held by Adam Crawford at the CRIMPREV conference on June 17-19, 2009, Milton Keynes, UK
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The Technology Of Control:
The Role of Technical Development in Exercising Social Control

It seems like the application of new forms of control is typical for both of the new trends of development and both types of “territorial occupation” are accompanied by the intensive deployment of the new technical devices. The exercising of control was of course characterized by the application of technical devices earlier as well and even then, there were two typical forms of these: (1) regional control and (2) control over persons. These days, it is not only in regional control that high-tech regional supervisory devices are used but due to the intolerance towards uncivilized forms of behavior and the intention to check the criminals (more intensively), it is the most advanced technical devices that are deployed in the controls over persons as well.

The technology of exercising control

The super powers’ relation changed with the collapse of Soviet Union, and the armaments have decreased temporarily around the late 20th century. Because of this new situation the financial investors had to look for a new area, and a “buyer’s market” which needs and can use high-tech developments definitely had to be found. The geographic information system (GIS) appeared among the tools of regional control on the turn of the 20th and 21st centuries. Through this, high technology appeared directly in crime control.

It seems like crime control may prove to be an excellent site for the development of high technologies, in several aspects:

1.) The fight against terrorism regularly requires the development and application of new technical devices, which themselves imply further developments (such as iris diagnostics, the Echelon system, etc.).

2.) Some of the other areas of criminal justice such as the execution of sanctions may also serve as buyer’s markets for high standard information technology. It is in these ways that among the devices of electronic personal tracking systems, ever newer generations of personal tracking devices suitable for satellite tracking and mobile phones have come to replace the personal tracking systems based on landline phones.

3.) Furthermore, the high-tech developments are utilized in the security industry and property protection.

Thus, a risk society is characterized by the search for the external (i.e. reassuring) forms of security. At the same time, as these security devices are applied, private security services cover an ever larger area, as a result of which public and private security meet on an increasingly large surface. The private sector makes up a dominant part of the Hungarian security industry. By providing security for the urban spaces, shopping centers, by safeguarding the residential parks, the players of the Hungarian security industry provide their services to those social groups in a more favorable position which are able and willing to pay for this service. However, we should not forget the social groups in less favorable positions either. They provide tasks to the security companies not as the users of the services but as target groups to be controlled, mostly on the basis of mandates from the local authorities. Let us just think about the mandate of the security company patrolling in Miskolc’s Avas housing estate, or the definition of the “supervised” zones in the city centers. A similar example is that at the Dzsumbuj estate (an infamous ghetto-like housing estate in Budapest’s 9th district), after the closing of the apartments that became vacant as consequence of the continuous evictions, the local authority entrusted the security companies with the prevention of the “trickling back” of squatters. In other words, security guards do not only guard the members of the social
groups in good or more favorable positions but they also supervise the members of the social groups in an unfavorable position.

The security industry has evolved in the past twenty years. By the end of 1996, as many as almost 600 thousand employees were employed in the security industry in the 15 member states of the European Union. In the European countries, private security is the second source of protection but in Canada, in the USA and in Australia, this already takes the first place. However, the absolute “champion” in the area of the security industry is South Africa, reports Jaap de Waard. Thus, from this aspect, Hungary well adjusts to the international development trends, as the number of those employed in the security industry well exceeds that of those working for the law enforcement agencies. However, the scene with several players also generates conflicts, as it blurs the borders of “public” and “private”. It is a task to be solved theoretically (as well) how the employment of policemen on their days off in the security industry, the participation of civilians in the fulfillment of police responsibilities (such as the activities of the militia), or formal and informal agreements (such as the provision of security services at sports events) should be treated. Poland developed a system of municipal police but this generated conflicts between the police and the members of the private security industry.

In the development of criminology, it can be followed how the findings of some other disciplines have been utilized by criminology in its proposals to handle crime. Nowadays, when high-tech developments dominate crime control, this situation is no longer about how a tool applied by another discipline is introduced by criminology and how it interprets its suitability for handling crime or the prevention of becoming a criminal – these new technical devices have nothing to do with the fact-finding science of criminology.

However, we should also understand that the utilization of innovative technical devices and new developments in criminological understanding has been typical of this discipline since the beginning. The formulation of the “Southern hypothesis” has resulted in the examination and analysis of many kinds of factors such as the climate, the culture, gun regulation, etc. The correlations of regional differences and crime were examined as early as at the dawn of criminology. The areas with a higher threat of crime were already illustrated by Lombroso in a map. The crime map as a tool, true, in a much more modern form, comes back in the “hot spot” threat assessment methods of the late 20th century... Guerry and Adolphe Quetelet also achieved significant results in the examination of the regional correlations of crime, comparing for the first time the regional distribution of crime with the figures of literacy, the density of population, wealth, occupation or nationality but the environmental characteristics were also taken into account. They were the first researchers to represent the importance of the sociological approach in the examination of crime. They believed that crime was a social phenomenon of which individual behavior or the motivation of a person was only one component, which is weightless in comparison to the social factors. The statistical data related to the crime and the criminal vary by time and place and the emphasis is on the objective social-structural factors when examining crime.

From the history of criminology, we know that this approach was relatively short-lived, since in the causal explanations for criminal activity, the biological and psychological explanations concentrating on the level of the

The revival of environmental criminology

In the past two decades, we have witnessed the revival of environmental criminology. According to the modern trends of this approach, criminality cannot be understood without having appropriate information on the environment in which this behavior is demonstrated, i.e. the demographic, economic, geographical and social conditions, where the crime was committed. Since the closest environment of criminal activity is the neighborhood where people live and the places which surround them, this old-new direction prefers to deal with the issues of urban crime.

By now, the approach of “hot spots”, which made the danger zones more visible by preparing the crime maps of the settlements, has mostly lost its popularity. Situational crime prevention was almost exclusively focused on the examination of the constructed environment, although we have known for a long time that urban security and the management of urban spaces can only be achieved by developing the environment and people alike. This is why nowadays the focus of environmental criminology has shifted towards urban management: with the aim to find out whether the aspects of security can be enforced by the creation of city planning standards, and to see what other methods are suitable in big cities for breaking the link between the environment and criminal activity. One of the biggest problems of environmental criminology these days is that it has not yet found out by scientific tools what changes the applied preventive measures will bring about. This means that the time has come to translate what criminologists already know to the language of engineers and urban planners.

New trends in personal control: biometric tools

Regional control means, in most cases, controlling the people (who pass the region). In the crime control of our days, however, such tools which are exclusively meant to identify and control persons have also appeared. These methods, first of all the biometric tools, represent the most advanced technical solutions of the present day. Biometrics is such an automatic technique which measures and registers an individual's physical, bodily characteristics and uses these data for identification and authentication purposes. The expression “automatic technique” means that three fundamental methods are linked within the application of biometric tools: the digital or analogous tapping and storing of the characteristics of the living person; the comparison of these characteristics with other features stored in the database, as well as linking them to the application systems.

Biometric technologies are suitable for individual identification because they are unique, i.e. persons can undoubtedly be distinguished from each other
by using them. Biometric features do not constantly change, i.e. by the person’s age, and they are gatherable, i.e. they can be made measurable. It is a further advantage of theirs that, by relying on this technique, a great amount of data can be handled fast. Biometric features can basically be divided into two main groups: (1) the physical characteristics related to the human body. The oldest biometric identifier is the examination of fingerprints, which method has been used for over one hundred years. Face recognition, palm prints and iris diagnostics also belong to this group. (2) The behavioral features related to human attitudes. The taking of signatures, which is one of the most commonly used methods nowadays as well, is the first behavioral biometric feature but voice identification is also used. In a narrower sense, voice also belongs to the physical features, since each person has their own tones but voice recognition is based rather on recognizing how a person speaks, so this should rather be listed among behavioral features. Science has disclosed several other biometric identifiers as well, such gait recognition, retinal identification, the characteristics of the outer ear, DNA, etc.

The application of biometric identification technology brings up a number of information security concerns. Morals and legality may easily clash in the case of these tools, since control cannot always be distinguished from identification. The fast progress of new technologies is a great threat to privacy, and makes it doubtful whether human personality can be preserved. In the opinion of many, technology is so perfect by now that it may violate personality rights, as the biometric identifiers are unchanged all through our lives; this is why they carry the threat of their later being utilized for other than the original purpose. One of the most difficult issues is the very durability of data and information: the situation is that once the fingerprints of a person are gathered, then these samples are “for ever”, since fingerprints do not change by age. The arising concerns are not unsubstantiated, as the necessity (or possibility) of personal identification may come up in a number of situations. It can be proven by some examples how many different interests may justify the expansion of control.

A school may introduce non-cash payment systems at the school canteens. The parents pay for the meals in advance and the amount appears on the students’ accounts. The children use these credits at the canteen by first having been identified by an automatic system at the cashier’s and their accounts have been debited by the price of the meals. The advantages of non-cash school catering are undoubted when the system is introduced: the students in need, who get free meals, do not stand out, i.e. they are not stigmatized. If the students have no money on them, there are lower chances of them losing it or spending it on something else, or of someone taking it from them.

Another school may introduce an automated system to register whether the children have participated in the school activities. The students are registered by an automated system at the front entrance of the school, at the beginning and end of the school day. This solution saves a significant amount of time for the staff but this tool also keeps those persons away who are not authorized to enter the school.

In the third example, a school may introduce the identification system based on biometric tools to support book lending. The situation is that in this system, there is an automatic recognition system that identifies and registers the names of the children, as well as the titles of the borrowed and returned books. The advantages are of course similar to those pointed out in the earlier examples, i.e. the students will not leave anything behind, they cannot lose anything, and
nothing can be stolen from them. The possibility of theft is very slight, since the students must attend and borrow the books themselves.

In the majority of cases, the data required for the identification of the fingerprints, the iris, the hands or faces must be stored. But where is the border between the storage of vitally important data and the misuse of personal data? The history of identification systems shows that they have a “crawling function”, i.e. they will later become part of such systems which were not announced, or not even seen when the program commenced. Although in Hungary, the use of personal identification numbers has been prohibited by the Constitutional Court, and this decision was explained by the very threat of the linking of databases, the need for them does exist. The situation is that there are definite signs indicating that public opinion on the sanctity of privacy is changing. The installation of closed-circuit television cameras is the best example for the tendency that citizens gradually accept control and they almost require those administrative mechanisms which would have been inconceivable in the 1970's and 1980's. Regional surveillance systems are able to handle and display a large number of data. They are increasingly suitable for simulating the correlations between the changes of the urban environment and the evolution of criminal activity, furthermore, for analyzing the correlations between the players of the social network and the regional characteristics. The situation is that by preparing crime maps, the 'hot spots’ in fact become visible, in the geographical sense. These areas do not only show the hubs of criminal activity but they well indicate those areas where the processes that jeopardize the sound development of the local community have started out from, or are going on, as well. Thus, the preparation of crime maps does not only have advantages but also, some disadvantages. As long as we do not take the characteristic features and problems of the population underlying the regional criminal data into account, this may easily lead to the strengthening of the tools of merely environmental control.

We know that crime (also) develops criminal prosecution: it is always ahead of it but it does make a difference whether it is by one or one hundred steps. And just as Marx “has turned Hegel upside down”, it seems as if the earlier causal relationship between crime and criminal prosecution had also turned upside down at one point. What we can see nowadays is that the development of crime and the “professionalism” of the criminals are “chased and made to run faster and faster” by criminal prosecution as well. We can draw this conclusion from how several millions of people get into an uncomfortable situation at the airports, since, if they want to travel, they are forced to loosen their waist-belts, to take their personal computers out of their bags, to separate their toiletries into transparent packets, to discard their mineral water bottles, their (however) expensive perfumes and everything else that is liquid or made of metal. They are compelled to take their shoes off, they should take being searched as normal and they should tolerate it, since all this is “not a big deal” and all this is for „their own protection”. Although it may easily happen that this is not the best way to combat the threat of terrorism. The thing is that if we expect a bomb-maker to make bombs from materials as easy to access and as few as possible, they will do so. But maybe we should not encourage science, which can also be utilized for evil purposes, to develop even faster. And in the meantime, we spend an awful amount of money but no one can say how efficiently this money is used. We behave the same way as in the case of advertisements: we definitely spend one half of the money in vain but we do not know which half. Maybe in this case, this is what happens to all our money?