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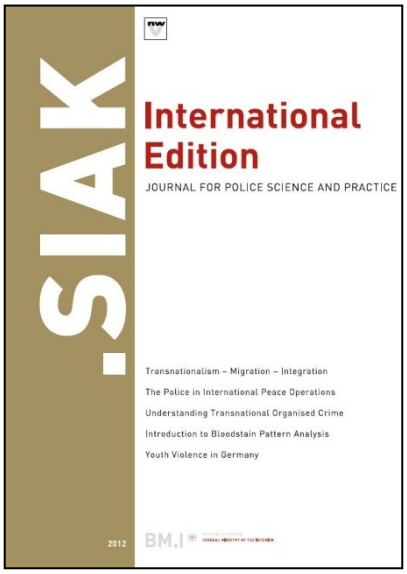

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Urban Resilience

A new paradigm of crime prevention through urban planning?

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Resilience is a new buzzword in national and European security research. The concept, which originates from a wide range of research contexts, promises answers to various security problems. The idea is that resilience plays a part in minimising risks and threats, and limiting, and ideally preventing, damage events (cf. Floeting 2013a, 19). In the specific context of cities, urban resilience means the creation of resistant structures that are also sufficiently flexible to be able to cope with unexpected events. The development of urban resilience follows approaches and strategies that have been discussed and increasingly implemented for many years in the field of crime prevention through urban planning. The question is, however, to what extent crime prevention through urban planning can benefit from the discourse about urban resilience and whether a resilience perspective can provide the basis for a new paradigm of crime prevention through urban planning. Urban resilience can be understood as an extension of crime prevention in a risk society. It can be seen, however, that the concept can only be considered promising with regard to crime prevention through urban planning, if questions of security are addressed not only in terms of construction and technology, but also their social context.

Crime prevention has become a core element of local security policy and crime control in the past two decades. Public order and security partnerships between the police, local authorities, housing associations, local public order services and neighbourhood watches are components of a local security architecture, in which the cooperation and coordination of the various players play an important role (cf. Bundeskriminalamt 2013; Frevel 2012; Stummvoll 2004). The rise in crime prevention is closely related to macro-social transformation processes, which are reflected in the widespread diagnosis of the times that we are living in a security or risk society (cf. Beck 1986; Groenemeyer 2010; Legnaro 1997; Singelnstein/Stolle 2006). Like other consequences of modernity, crime too is no longer seen as an inevitable occurrence that cannot be influenced, but rather as a modernisation risk (cf. Blinkert 1988) whose likelihood should be calculated statistically and whose potentially damaging effects should be identified. Local security policy follows that actuarial logic to the extent that it develops a form of risk management for handling criminal behaviour that differs sharply from repressive strategies.[1] Preventive efforts are less and less focused on the offenders and their motives than on situations judged as risky

and the everyday routines of potential victims, which create opportunities for crime as unintended side effects. Security policy therefore revolves around the calculation of risks and the development of situational preventive measures, which in German and Austrian municipalities take shape in the context of urban crime prevention in particular.

Crime prevention through urban planning has gained significantly in importance in police work in particular. Whereas German local governments are often familiar with the numerous recommendations, standards and procedures of crime prevention through urban planning, but barely use them in practice (cf. Floeting 2013b, 235), many police authorities have set up special groups to advise on urban development. For instance, the Berlin Criminal Police Office or the Frankfurt Police Headquarters now have specially established offices which are tasked primarily with combining the various activities of crime prevention through urban planning and linking up police expertise with planning and design know-how. In Austria police findings have not yet been integrated on the planning level, but aspects of crime prevention through urban planning are certainly addressed in the context of implementing gender mainstreaming (cf. Behrmann/Schröder 2013, 230). In Vienna, for instance, the concept of design and construction to meet everyday needs and the needs of women is well established in local administration structures as a municipal department, with aspects of safety and the public's feeling of safety being taken into consideration as well as gender-specific aspects of spatial planning and transport planning (cf. LKA Niedersachsen 2012, 18).

Approaches to crime prevention through urban planning currently provide the point of departure for the development of urban resilience. Resilience is a "fashionable buzzword" in the current security discussion (Boin et al. 2010, 1) that promises answers to a range of security problems. In the following section I will discuss to what extent crime prevention through urban planning can benefit from the discourse about urban resilience. The question in this respect is whether the urban resilience perspective can provide the basis for a new paradigm of crime prevention through urban planning.

1. CRIME PREVENTION THROUGH URBAN PLANNING

The conceptualisation of crime prevention principles in urban planning is based on strategies that have gained prominence in the recent past in the explanation and avoidance of criminal conduct under the collective term of situational crime prevention. Situational approaches to crime prevention are aimed at systematically reducing the opportunities to commit crime. The idea is to reduce the accessibility of criminal means and targets, and increase the risk for the offender that the crime will not succeed. "Situational prevention comprises opportunity-reducing measures that (1) are directed at highly specific forms of crime, (2) involve the management, design or manipulation of the immediate environment in as systematic and permanent a way as possible, (3) make crime more difficult and risky, or less rewarding and excusable as judged by a wide range of offenders" (Clarke 1997, 4). The aim is to reduce crime as an event quantitatively and to reduce it qualitatively or at lease minimise its direct consequences by identifying and analysing opportunity structures. In this context, minimising negative consequences also means reducing excessive fear of crime.

Situational crime prevention strategies have their theoretical basis in criminological approaches whose preventive logic is based on a concept of crime as an indi-

vidual cost-benefit calculation and which identify the causes of crime as situational circumstances that enable or are at least conducive to criminal acts. According to the routine activities approach, crime always occurs where three conditions are present together in space and time: motivated offenders, opportunities for crime and the absence of capable guardians (cf. Cohen/Felson 1979). Taken as a rational choice, it is expected that the "reasoning criminal" (Cornish/Clarke 1986) weighs up the costs and benefits of a criminal act before deciding on that basis whether to commit the crime or not.

In terms of urban development, it is assumed that the targeted implementation of design and construction measures can influence local crime opportunity structures, and as a result reduce crime-related fears and the level of criminal and non-criminal deviance. The range of promising recommendations extends from effective nighttime lighting through the design of green spaces, access ways and paths to the decentralised location of infrastructure facilities such as shops and supermarkets.

The "defensible space" approach (cf. Newman 1972), in which the architectonic design of buildings and residential estates is combined with aspects of security, is key to the effort to include aspects of urban planning in the analysis of criminal opportunity. This approach revolves around increasing social control by fostering responsibility. "Natural surveillance by residents, in the sense of informal social control, should be triggered by architectonic and urban design, with residents symbolically marking out defended and defensible spaces with signs of appropriation of the space" (Schubert/Veil 2011, 84). Defensible spaces can be seen in this sense as a physical expression of social systems that defend themselves. "'Defensible space' is a socio-physical phenomenon" (Newman 1972, 4). The idea is that construction design contributes to the creation of functional neighbourhoods, with building structure appearing less a stand-alone way to prevent criminal behaviour than an aid to the self-help of residents. Defensible structures of local self-organisation are intended to reduce the necessity for state and municipal interventions.

The defensible space model is the starting point for a series of other approaches, though the original idea of increasing informal social control occasionally gives way in these to a focus on the architectonic and urban design of residential estates that is directed at social exclusion. The joint basis of approaches such as "Crime Prevention through Environmental Design" (CPTED; cf. Crowe 2000), "Secured by Design" (cf. Cozens et al. 2007) and "Design out Crime" (cf. Ekblom 2012) is the principle of target hardening, i.e. reducing the vulnerability of a potential target by taking active measures to secure it. "The most obvious way of reducing criminal opportunities is to obstruct the vandal or the thief by physical barriers through the use of locks, safes, screens, or reinforced materials" (Clarke 1995, 110). Through planning and design, neighbourhoods are intended to be structured in such a way that human behaviour is influenced by barriers, limited access and physical reinforcement of the physical environment. While symbolic barriers were originally intended to be used to divide different claims to use and ownership, this much narrowed approach is now dominated by real barriers, whose problematic effects on urban design are illustrated particularly clearly by the example of gated communities.[2]

While the above-mentioned design recommendations solely comprise architectonic and open space planning measures, the "second generation"[3] of CPTED concepts goes beyond mere spatial design and

also includes social planning and social management strategies. That means the focus is not only on the design of physical space, but also on working with the users of the space. In returning to the original idea of "defensible space" as a socio-physical system, the new social factor is intended to promote the integration of residents by providing offerings for various target groups. "Social relations which are so important to the fundamental principle of 'informal social control' cannot be made a moral obligation, and must instead be generated as a 'side effect' of spatial design" (Stummvoll 2002, 8). The intention is to create infrastructure in the form of schools, playgrounds, parks, shops and neighbourhood centres that can promote the development of social relations.

The "third generation"[4] of the CPTED concept, which attempts to reconcile the central social topics of security and sustainability in the implementation of crime prevention strategies, is now taking shape. The two concepts until now were largely seen as unreconcilable within the planning process. Compromises frequently had to be made in the sustainable, ecological design of new urban areas in order to ensure safety or to make residents feel safe. Ecological responsibility and sustainable management are therefore also to be incorporated into urban crime prevention. The aim is not only to increase safety and perceptions of safety with regard to crime, but also the overall living quality of the urban residents by using renewable energy sources and innovative technologies. As an extension of traditional security concepts, according to which a distinction is made between internal and external and physical and economic security, the "third generation CPTED" also addresses security problems resulting from the ecological consequences of global warming: "The premise of third-generation CPTED is that a sustainable, green urbanity is perceived by its members and the outsiders as safe. Third-generation CPTED's focus on sustainable green environmental design strategies insists on practical measures, physically or cybernetically enhanced, that foster the perception of urban space as safe beyond mere concerns about crime" (UNICRI/ MIT Senseable City Lab 2011, 19). Crime prevention through urban planning in this context can be understood as an element of sustainable urban development that plays a part in overcoming social conflicts stemming from socio-economic and demographic processes.

2. URBAN RESILIENCE

While the importance of sustainability has only just been recognised in crime prevention through urban planning, beyond that field another paradigm change seems to be taking place, with the idea of sustainability increasingly being replaced by the concept of resilience. The social psychologist Harald Welzer (Welzer 2013) cites in a newspaper interview the economist Dennis L. Meadows, one of the authors of The Limits to Growth, who calls for a change in perspective from a policy of sustainability to a policy of resilience in view of the seemingly inevitable overburdening of the planet.

Resilience means the ability of a system to cope flexibly with harmful influences, to compensate for these and to overcome them in such a way that the system's own ability to act remains intact. The concept is applied in an extremely wide range of research contexts. The common underlying notion of error tolerance based on the ability to resist and adapt seems to "stimulate exchange between different disciplines and topic areas" (Felgentreff et al. 2012, 70). In engineering sciences, for example, resilience signifies the physical ability of a body to spring back to its

original shape after being deformed externally. In psychology, resilience is defined as the phenomenon of positive adaptation or development in the face of adverse life circumstances or events (cf. Mergenthaler 2012, 62). The resilience approach has its roots in ecosystem research, where the term is understood as the capacity of an ecosystem to tolerate disturbances and change without entering a qualitatively different state with new structures, functions and control mechanisms (cf. Holling 1973; Voss 2010, 69). Further characteristics of resilient systems from this point of view are the capacity for self organisation and the possibility to develop learning and adaptation skills.

Resilience is often taken as the reverse of vulnerability in risk and disaster research. Resilience is understood as the ability of a society to cope with a crisis or catastrophe relatively quickly, and hence to restore the ability to act and function of the people and technical systems concerned as quickly as possible. The popularity of the concept can be explained by a paradigm shift that occurred during the 1970s – the almost exclusively natural science domain of risk analysis was increasingly replaced by a more social scientific approach to social processes in connection with natural and anthropogenic disasters. The resilience approach meant a change in focus from "isolated" natural events towards society and its coping strategies (cf. for example, Bara 2011, 78 et seqq.). Based on the realisation that absolute security is not possible in a highly developed, linked-up and increasingly complex world, the focus is less on safeguarding against possible risks than on the creation of general resistance in case a disaster occurs despite all precautions.

In terms of security in the specific context of cities, urban resilience means "the degree to which a city is able to tolerate alteration before reorganising around a new set of structures and processes" (Resilience Alliance 2007, 8). The particular vulnerability of cities is due to the catastrophic consequences that unforeseen events can result in. Cities are highly complex systems, whose supply infrastructure and transport hubs can be considered particularly vulnerable. Even relatively small disturbances can have cascade effects and cause catastrophic damage. In this regard, resilience enables municipalities to take measures within their own competence, to safeguard resources in a forward-looking manner, to have infrastructure in place and to preserve or create structures that are robust enough to guarantee future urban development despite crisis phenomena (cf. Bürkner 2010, 23 et seq.; Hitthaler 2011, 43).

The concept of urban resilience promises answers to the question of how disruptions to life in cities can be prevented in the future, and how their effects on urban cohabitation can be reduced and overcome. Resilient cities are "capable of withstanding severe shock without either immediate chaos or permanent deformation or rupture. Designed in advance to anticipate, weather, and recover from the impacts of natural or technological hazards, resilient cities are based on principles derived from past experience with disasters in urban areas" (Godschalk 2002, 1).

Since looking to the past only enables unreliable statements about the future, urban resilience specifically involves dealing with a lack of knowledge in view of the complex interrelations and inability to predict the magnitude and frequency of crisis events in the case of urban systems in particular. The vulnerability of a community to risks and dangers cannot be fully predicted. The complexity of urban structures therefore calls for a holistic concept of urban resilience that integrates construction and social factors at various levels of urban development.

In the context of managing structural damage, such as earthquakes or flooding, urban resilience is predominantly focused on the built environment. Resilience in this context means "the ability to restore building structures and the functional integrity of a city" (Bürkner 2010, 23). In discourse about the prevention of catastrophic events, urban resilience is understood as the ability of cities and local players to develop effective forms of control and efficient institutions for dealing with presumed or real terrorist risks. The consequences of urban policy based in such a way on the principle of "designing out terrorism" (Coaffee 2004) can be criticised as a form of "military urbanism" (Graham 2010) that ultimately leads to the special features of urban life, its openness and liberalism, turning against themselves and increasingly limiting fundamental civil rights by means of ever greater technological surveillance (cf. Rogers 2012; Savitch 2008). Jon Coaffee (Coaffee 2004) shows using the example of London how risks are shifted and zones of varying security levels are created by means of a dichotomous strategy of fortification and increased technological surveillance. Coaffee argues that controlled high-security zones in particular, are practically disconnected from the rest of the city.

Contrary to this "built-in resilience" (Bosher 2008) based on construction and technology, Martin Innes and Vanessa Jones (Innes/Jones 2006, 50) identify "the presence of collective efficacy in a community whereby a group of people come together around a shared goal, such as improving feelings of safety and security" as a source of urban resistance. Based on the idea of collective efficacy (cf. Sampson 2012, 149 et seqq.), a neighbourhood appears resilient, if its residents work together for the common good and there are mutual trust and shared norms among the neighbours. According to this "soft" perspective, urban resilience is a bottom-up process, in which resistance and flexibility are the result of social cohesion and local expectations of control and intervention. The resilience of the population can be described as the "capacity of a social entity (e.g., a group or community) to bounce back or to respond positively to adversity" (Maguire/Hagan 2007, 16). Resilience from this perspective is a condition of everyday urban life that also comes into effect in situations other than disasters. Resilient societies can call upon "self-help abilities and skills" (Gusy 2013, 997), which, however, are also tested in social coexistence. In this context, the strengthening of the resilience of the public is aimed at "giving citizens back their individual ability to act and promoting the development of civic engagement. [...] The strengthening of social solidarity leads to stronger informal social control. It is important for the development of resilience" (Gerhold 2011, 6).

3. URBAN RESILIENCE AS A PARADIGM OF CRIME PREVENTION THROUGH URBAN PLANNING

Urban resilience is viewed above all as a response to major damage events. Accordingly, it is currently a much-used concept in the field of civil protection and disaster relief. The aim is to protect critical infrastructures from natural risks or terrorist attacks, and prepare the population for new, until now barely conceivable risks and uncertainties. The notion of applying urban resilience in this context to phenomena of everyday crime that seem positively commonplace requires justification. First, it is of course also possible to conceptualise "crime as a disaster" (Feltes/Kudlacek 2013), which can even become a "life disaster" (Hanak et al. 1989) for

the victims concerned. Second, measures taken to combat terrorism, for instance, also leave their mark on the prevention and tackling of everyday crime. Both terrorism and everyday crime require risks to be averted in situations of uncertainty, and both involve measures being taken before a given event occurs in order to prevent, delay or at least minimise its consequences. True, the problems addressed in combating terrorism are of a greater order of magnitude. The risks with which national control institutions are confronted are more difficult to predict, and the consequences of a possible damage event are generally more catastrophic and attacks on individual freedom may be greater and longer-lasting. "Nevertheless, they are not fundamentally different from the problems that arise when tackling everyday crime. Here too risks need to be assessed […]; here too state responses need to be proportional to the likelihood and the severity of the given risk" (Zedner 2012, 37). In order to combat terrorism, law enforcement authorities have been given massively extended powers, which also has an impact on how everyday crime is tackled. The underlying idea is that if terrorism is a crime, then far more commonplace criminal acts can also be combated effectively using such means of law enforcement and prevention. "New security measures, whose introduction is deemed necessary in order to protect the public or even the life of a nation against extraordinary threats, have the ominous tendency to be extended to much lower threats and to become integrated into everyday law enforcement practices and police work" (Zedner 2012, 37 et seq.). In this way, even simple forms of crime are set in the context of threats to national security (cf. Kaufmann 2013, 1011 et seq.). However, even with increased risk prevention and optimal risk management, threats to security cannot be absolutely avoided, since, as we well know, there is no such thing as 100 % security. Coping and protection strategies need to be developed in case the unavoidable occurs in order to manage recovery from damage consequences effectively and prevent events from escalating.

Resilience-based strategies of urban security expect the unexpected, rather than anticipating a specific occurrence. Where the formation of urban resilience implies that communities need to increasingly adjust to conditions that cannot be precisely forecast, the controllability of future events is called into question (cf. Würtenberger 2011). Optimism about being able to control social threats gives way to an understanding that security problems cannot be overcome, and instead can only be minimised in their degree and intensity. In the field of crime prevention, increasingly advanced ways are being devised to come up with valid forecasts for the occurrence of crime. The hope is that innovative forms of policing, for example, will enable the prediction of crime in space and time in the future. "Predictive policing" (cf. Haberman/Ratcliffe 2012) is seen as a way to help prevent crime by analysing information about previously committed crimes and applying highly complex algorithms.[5] The preventive calculation of crime risks, however, presumes that risks are calculable and that risky situations can be identified using objective criteria, based on reliable data. In a risk society "new risks are characterised by the fact that the occurrence of damage is anticipated and damage is no longer treated as the result of incorrect planning or human failure, but as unavoidable. Then it all comes down to preparing for the consequences" (Groenemeyer 2001, 161). That focus applies not just to technological or ecological risks, but also to criminal behaviour. It follows that urban resilience can certainly be un-

derstood as the extension of crime prevention in a risk society. If the commission of crimes must be anticipated, then society and its citizens need to be prepared for the normality of crime. "Resilience in this context does not mean institutionalising increasing security measures, but steering clear of overplaying topics and strengthening social cohesion" (Gerhold 2011, 7). A lack of social cohesion weakens informal forms of social control over potential targets.

In a recent publication, Stefan Kaufmann and Sabine Blum (Kaufmann/Blum 2013) traced the rise of vulnerability and resilience as a "shift in ideas" within and among fields addressing various risks and security problems. Looking at the development of strategies of urban resilience, it can be seen that this development is strongly based on principles of urban crime prevention. Anti-terrorism measures, which today go under the label of "design out terrorism" can, like the notion of "design out crime" be traced back to situational concepts such as are already applied in the "defensible space" approach. Physical barriers are designed to protect against the risk of an attack by blocking access to the target and using materials that are robust enough to withstand an explosion. In the wake of the terrorist attack on the Word Trade Center in 1993, The New York Times (Brown 1995) wrote that "Barricades and bollards have become the newest accessory on this country's psychic frontier. [...] You might call it the architecture of paranoia. They call it 'defensible space'." In disaster discourse, the original notion has ultimately become so strongly associated with physical and technological control mechanisms that urban resilience can easily be discredited as an element of a sweeping surveillance state. In crime prevention such a one-sided concept would run counter to efforts to anchor the socio-spatial conditions of urban security as part of crime prevention in urban development and to overcome the narrow understanding of situational approaches. On the other hand, however, the logic of resilience is aimed "perhaps in contrast to the 'Big Brother state', at creating a subjective and systematic set of circumstances that enable everyone to live freely and without fear even in a world full of risks" (Lentzos/Rose 2008, 99). It follows that urban resilience can be understood as the ability of a society to establish common values and maintain those through effective social control. Cohesion and mutual trust between the members of the community, who enable collective control to be exercised in the first place, are key to that.

If urban resilience as a strategy for creating security can take on such different forms that resilience can equally well mean increased surveillance and technology-based access controls as the strengthening of social cohesion, then increased attention should be paid to the general conditions under which resilience and prevention are related. Aaron Wildavsky (Wildavsky [1988] 2011, 77 et seqq.) regarded a combination of resilience and anticipation as the optimal way of dealing with social risks. Today attempts are occasionally made to create a dichotomy between the two approaches (cf. Perelman 2007, 21). Here it can be seen that the concept of urban resilience can primarily be considered promising in the context of crime prevention through urban planning if questions of security are addressed not only in terms of construction and technology, but also their social context.

[1] *On the theoretical model of "actuarial justice", cf. Feeley/Simon 1994.*

[2] *On the socio-spatial consequences of this form of living, cf. Wehrheim 2012, 181 et seqq.*

[3] *On "Second-Generation CPTED" cf. Saville/Cleveland 2008.*

[4] *On "Third-Generation CPTED" cf. UNICRI/MIT Senseable City Lab 2011. On the relationship between security and sustainability in crime prevention through urban planning, cf. also Armitage 2007 and Marzbali et al. 2011. The ecological benefits of crime prevention measures in urban development are demonstrated by Pease/Farrel 2011.*

[5] *A description of Austrian efforts to predict crime hotspots can be found in Marouschek 2008.*

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