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# Pressured to Learn? Swedish Police Experiences of Curbing Organised Crime

## Abstract

This research takes an interest in the police's capacity to learn and adapt in an on-going policy failure. Using the literature on organisational learning and adaptation, it investigates how the police combine exploration of new possibilities and exploitation of old certainties. This article delves into the Swedish police's adaptation to a wave of organised and aggravated robberies that in the years around 2005 seemed out of control. It argues that the Swedish police need to create organizational ambidexterity<sup>1</sup> by implementing a mix of exploitation and exploration, as well as engaging societal actors external to the police when old practices run dry. This means that the law and order sector needs to refine their competences, and utilise new ideas and promote innovation from companies and other authorities for dealing with the tasks at hand. Furthermore, the organisational theory toolbox has proven that it has great potential for diagnosing current learning and adaptation efforts within the law and order sector, as they happen.

**Keywords:** aggravated robberies, crime prevention, exploitation, exploration, prevention of organised crime, proactive policing, Sweden, target hardening

## Introduction

Experts in the field of criminology and police research have for a long time expressed doubts regarding the police's prospects for curbing criminality (Gottfredson and Hirschi, 1990; Bayley, 1994; Lim, Lee and Cuvelier, 2010). According to these reservations, the police are inherently unskilled as far as adapting to their surrounding environment is concerned.

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<sup>1</sup> Organizational ambidexterity refers to an organization's ability to be efficient in its management of today's activities and yet also adaptable for coping with tomorrow's changing demands.

However, an increasing number of studies have recently revealed more promising police adaptability in certain circumstances. Here the area of interest is situational crime prevention, especially hot spot policing. Based on the observation that some types of crime are concentrated to specific places and specific times, hot spot policing has proved efficient for both pre-emptive and investigative purposes (Sherman, 2002; Weisburd, 2011). Just like hot spots are suitably low-hanging fruit for the police to prove adaptability, it is an equally low-hanging fruit for criminological research, with easy to measure observations linked with easy to audit results. Obviously, there is a wide range of crimes that cannot easily be predicted from blunt time/space parameters. Organised crime in various forms is much less dependent on certain geographical areas; for example, trafficking of drugs, people and weapons follow a large number of different and varying routes throughout the world. Economic and cyber-crimes might be the most evident examples of when criminality occurs with a very limited connection to a specific hot spot, and thus cannot be policed simply by the deployment of officers to certain potential hot spots. Are these areas out of reach for police learning and adaptation? Or are the analytical tools typically employed by criminologists unsuitable for unearthing such learning curves?

This study departs from a case where the law and order sector in Sweden<sup>2</sup> had a dramatic success in curbing an increasingly severe trend of cash-in-transit and cash depot robberies in the years following 2005. The police and security companies eventually managed to increase target hardening (see Clarke 1997; see also Kruize 2001 for a Nordic example), something which primarily reduced the amount of money that was robbed, both in more organised and spectacular heists<sup>3</sup>, as well as the less organised “sidewalk robberies”.<sup>4</sup> In this article, we use

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<sup>2</sup> In this article, the law and order sector includes the police, as well as private actors such as cash transport companies, security companies and banks. Furthermore, “police” should be interpreted as certain parts of the police at the national level (parts of the National Bureau of Investigation), as well as certain parts of the police at the regional level (mostly the Police Authority in Stockholm County).

<sup>3</sup> We use the word ‘heist’ interchangeably with ‘robbery’ to avoid linguistic repetition.

the concept of more organised cash-in-transit robbery in referring to incidents In this article, we use the concept of more organised cash-in-transit robbery as referring to incidents involving more than two perpetrators, typically acting simultaneously at several different locations, with an amount and quality of equipment (weapons, explosives, vehicles) that requires planning, going after and often succeed in taking a larger sum of money, using more violence, going after a more difficult target.

This case is interesting since it shows an instance of learning and adaptation that clearly challenges conventional criminological wisdom. Large-scale robberies of cash-in-transit vehicles are by definition not limited to a certain place; the perpetrators certainly try to rob cash-in-transit vehicles where the authorities do not expect them to be (however the vehicles do have a number of designated pick-ups). The case merits its own account, but it also encourages students of learning and adaptation in police organisations to broaden the theoretical scope; if it is helpful to use unorthodox analytical tools to comprehend this case, such tools may also serve the purpose of viewing other cases differently. Furthermore, by importing theories from organisational sciences into criminology we can better understand the police as an organisation, rather than treating it as something that cannot be studied since it is something “quasi unique” (see Manning, 2010, p 134, for this critique of police studies). Therefore, the aim of this article is twofold: a) to account for the police’s various proceedings in terms of learning and adaptation in this particular case, and b) to probe the fruitfulness for the law and order sector of a theoretical framework that was developed in the field of organisational sciences.

The theoretical lens that will be applied here is sensitive to exploitative uses of known practices and exploratory ventures into innovative ways of doing things in order to learn and adapt to a changing environment. The lens has been widely used in organisational sciences,

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<sup>4</sup> Sidewalk robberies describe a more spontaneous act where typically two robbers threaten a security guard in order to get a money bag and then flee on a moped.

where the organisations studied have typically been profit-maximising units. What makes it interesting here is that it captures a highly relevant conundrum also for the management of public organisations: in order to be competitive, or to meet public and political expectations, should focus be on doing the same things as usual but better, or should focus be on innovation? Or should a certain ambidexterity between exploitation and exploration be aimed at?

### **Ambidextrous Learning and Adaptation**

From the vantage point of the decision makers who are faced with growing critique and dissatisfaction over the increase in criminality, the ‘what to do now’ question implies a principally important trade-off between exploiting the tried and tested or creating exploratory ventures into new practices. Both ways are associated with different risks, ambiguity and uncertainty. Even when current practices are widely criticised, it is not simply a matter of course to do new things to turn the tide. It has been observed that organisational learning under external pressure is indeed a difficult proposition (Wise, 2002). Bureaucracies are presented with a paradoxical situation: the need to learn is greatest when it is hardest to achieve. The ambiguity inherent in crisis situations not only makes it difficult to derive clear-cut lessons from them; external threats also tend to generate defensive and introvert organisational behaviour, which inhibits learning (Hermann, 1963; Janowitz, 1959). Political pressure and condemnation regarding organisational practices are likely to exacerbate organisational tendencies to retire into their shells (Dekker and Hansén, 2004). James March (1991, p 85) argues that exploitation, i.e. the refinement and extension of existing competences, is typically marked by positive, proximate and predictable returns. This argument maintains that organisations should stay within their comfort zone even when there is no external pressure.

Truly novel ideas are heavily ambiguous, where ambiguity is defined as “uncertainties about probabilities” (Snow, 2010, p 133); that is, when risk taking is not easily calculable. This is why new ideas are often seen as bad, and why even good ideas are often aborted by managerial staff before they have had a chance to prove their potential (March, 2010, p 77).

In a protracted course of events, when positive returns fail to appear, the likelihood to embark on exploratory endeavours (i.e. experimentation with new alternatives) may increase. Exploratory efforts in public bureaucracies have a corollary in notions of double-loop learning (Argyris and Schön, 1996), or social policy learning (May, 1992; Birkland, 2006; 2009). This type of organisational learning goes beyond adjustments in organisational programs and it is aimed at the core of the problem itself. Attitudes towards organisational goals and the nature and appropriateness of organisational action are critically evaluated. Truly soul-searching organisational learning efforts may result in none or only minor adjustments to existing policies, but more likely may lead to perceptible reorientation of activities. This in particular holds if the learning process reactively departs from a failure to meet expectations when there is an external pressure for something to be done. Even though double-loop learning as such is a rare phenomenon, it can be assumed to pave the way for exploratory endeavours. To please the surrounding and to a large extent politicised world, it may however suffice to pay lip service or to construct so-called fantasy documents that serve as temporary smoke-screens (cf. Birkland, 2009). It is in other words important to distinguish genuine from apparent manifestations of exploratory adaptation.

In the literature on organisational adaptability and learning, the inherent tensions between exploration and exploitation have been central since James March’s seminal contribution (1991). It represents a generic trade-off for any organisation that finds itself out

of touch with its environment, or wants to be up to speed with it. To fruitfully adapt, the trick seems to be to combine exploratory and exploitative strategies.

Adaptive systems that engage in exploration to the exclusion of exploitation are likely to find that they suffer the costs of experimentation without gaining many of its benefits; systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria (March, 1991, p 71).

The notion of *ambidexterity* is a direct corollary to the insight that a single-minded emphasis on either exploration or exploitation will not serve the organisation well (March, 1991; 2010; see also Andriopoulos and Lewis, 2009; Raisch, Birkinshaw, Probst and Tushman, 2009).

### **Ambidextrous Learning and Adaptation within the Police**

Learning and encouraging change within the police is often controlled from the top, not something the rank-and-file themselves suggest; more often than not from outside of the police organisation rather than from the inside. Police reforms are typically not initiated by the police (Bayley, 2008). These conditions have been identified as important explanatory factors to the high degree of friction in the execution of police reform. Other reasons are attributed to resistance to change promoted by the top level command from street-level police officers, specialised units and police officers, and police unions (Skogan, 2008). Adding to this is the often awkward ways that certain reforms are suggested and implemented within police organisations. Reforms, initiated from the outside and/or from the leadership, are often perceived as something that do not concern the core police work, but rather are regarded as additional exercises in bureaucracy and supervision as well as another source of stress (Toch, 2008). These observations of reform efforts within the police are arguably valid also for less far-reaching changes.

Exploratory accomplishments within the police may differ compared to less politicised organisations. As for authorities that must adhere to political masters who decide their budgets, mandates and in varying degrees prioritisations, there are boundaries to exploratory efforts. We assume that for the police, exploratory endeavours entail a certain amount of risk taking (of a non-calculable sort) that challenges foremost organisational routines, including leadership practices, the chain of command and thresholds for the inflow of information (c.f. Pandey and Sharma, 2009). Exploration comes with risky challenges both in respect to internal organisational routines and external liabilities vis-à-vis the political level. Such preconditions set the tone for what can be expected of exploration in police organisations.

The prospects for ambidextrous learning and adaptation within the police may look sombre, if expectations in general lean mostly towards exploitation. We however argue that the notion of ambidexterity should be decomposed into empirically researchable subunits that help unearth the phenomenon of learning and adaptation. In line with Raisch et al. (2009), we propose that there are *different ways of achieving* ambidexterity (differentiation/integration); that there are *different loci for its manifestation* (individual/organisational); that *prerequisites for its coming into fruition* may vary (static/dynamic); and that ambidexterity can *arise internally or externally* to the organisation in question.

Differentiation/integration: Should exploration and exploitation be conducted in the organisation as a whole, or should the organisation be compartmentalised into units that either spend resources on the tried and tested or invest in riskier projects? How to achieve ambidexterity seems to be divided along this line in the business literature (Taylor and Helfat, 2009; Raisch et al., 2009). Integration and differentiation of exploratory and exploitative activities can however be seen as complementary strategies over time, or between tasks, provided that ongoing managerial attention is paid to the potential tension between them

(Ibid.). This study will be attentive to how ambidexterity is achieved within the police: if there is a tension between integration and differentiation, and how this is managed. Police research gives a few expectations on what to find. Since police change and reform is a slow and painstaking endeavour, often met with resistance, the process is arguably more successful if focused to small units. Drawing on the literature (Skogan, 2008; Toch, 2008), it is probably important to involve police officers on different levels within the affected unit early on in the process of introducing novelty. Their experience with regard to how they do their job as well as how previous attempts to change and reform have turned out may be decisive for the prospect of success.

Individual/organisational: Ambidexterity is intuitively conceived of in terms of organisational activity. Individuals engage in either exploration or exploitation. There may however be a need for top level managers to exhibit personal ambidexterity for the organisation to follow suit. There is reason to believe that organisational ambidexterity is influenced by, but not limited to, its leaders', or potentially colleagues', cumulative personal ambidexterity (Mom, van den Bosch, Frans and Volberda, 2009; Raisch et al., 2009). Individual managerial ambidexterity is potentially decisive in cultivating organisational ambidexterity within the police and other organisations with firm hierarchical dependencies (Bayley, 2008; Skogan, 2008).

Static/dynamic: If exploration and exploitation are both necessary for an organisation, it can be tempting to strive for simultaneous exploratory and exploitative achievements; a fixed proportion of each will serve the organisation well. This view may however appear static (Raisch et al., 2009). A dynamic approach would allow for different emphases on exploitation and exploration at different times and under different circumstances. The thrust here is to identify the degree of flexibility and dynamism over a time sequence, rather than to specify the circumstances that precipitate any particular

combination or emphasis. Weighting exploration and exploitation against each other, deciding to what extent one should be prioritised above another, and at what time this should be done, might be a typical case for when to decentralise decisions and involve police commanders and police officers at different levels (see Toch, 2008).

Internal/external: Venturing into the unknown can be too much to ask for an organisation's internal capacity. Exploration can in such cases be reached by integrating external knowledge. The managerial challenge to reach ambidexterity then becomes a matter of integrating internal and external knowledge, which relies on external brokerage and internal absorptive capacity (Cao, Gedajlovic and Zhang, 2009; Raisch et al., 2009). We will here pay attention to both internally driven ambidexterity and the potential for externalised components to that effect.

The theoretical exposé draws attention to some rather descriptive questions for the analysis of the case in point, but also in general. They regard the police methods applied. Which old ones were exploited and how? Which novelties (in terms of police methods) were seen as necessary, and where were they located? How, if at all, were trade-offs between old certainties and new possibilities executed? The description of this set of facts in turn helps fulfil the explanatory ambition of the study. It is believed that the curbing of the wave of heists can be explained by the ambidextrous way the police learned and adapted.

It has been argued above that timing and fluctuations between important trade-offs in pursuit of ambidexterity are important to capture empirically. We will therefore distinguish a number of problem areas that are key to understanding learning and adaptation in this case. The description is problem-oriented and captures instances where trade-offs between exploitation and exploration crystallised.

## **Tracing a Process of Exploitation and Exploration**

Before presenting the case study on the Swedish police's learning, a methodological concern will be clarified. The study will adopt a process tracing strategy (George and Bennett, 2004) that dissects cuts up the case in theoretically relevant pieces. This article therefore describes a number of dilemmas that the Swedish police, and other relevant actors, had to deal with in the early 2000s. This process tracing jumps from observation to observation looking at the actions taken and shun; typical content items of learning and adaptation. This is also in keeping with the purported aim of the article. Some of these observations are about target hardening and the like, and some imply novelty. The various observations in the process described have been selected because they tease out the police's strategic judgement. And it is precisely what the theoretical lens is expected to explain. This section is therefore followed by an analysis where the theoretical part of the article will be used to explain the learning and adaptation pattern of this case.

## **The Case of Curbing a Heist Trend in Sweden**

On August 29, 2005, a cash-in-transit vehicle with 73 million Swedish Kronor (€8M) in cash was heading south on one of Stockholm's heavily trafficked motorways.

Along the way, a number of robbers scouted for the vehicle. As they saw the van heading south, they alerted their "command centre" that had been established along the motorway. The "command centre" started to direct other members of their network to their predetermined positions. Four cars caught up with the van and forced it to stop by the exit to Hallunda. A handful of masked men jumped out of the vehicles and surrounded the van, something they had rehearsed at least three times before. The offenders left the scene with 15 million Swedish Kronor (€1,7M). The police later arrested half a dozen of the perpetrators who were sentenced

to several years of imprisonment. But the money still has not been retrieved (Södertörn Police District, 2007; Svea Court of Appeal, 2006a; Huddinge District Court 2006).

The Hallunda motorway heist was spectacular as the robbers used burning cars and bomb dummies to cause a traffic gridlock. They were masked and heavily armed and they performed the robbery in the middle of rush hour. However, several robberies of cash-in-transit vehicles had already started to occur a couple of times a month in Sweden in the early-mid 2000s, often involving automatic weapons and explosives. As shown in Figure 1 below, between 1998 and 2000, Sweden saw a sudden increase in robberies of cash-in-transit vehicles, from about 20-25 robberies a year to more than 50 robberies a year (Swedish National Council for Crime Prevention, 2011b; Figure 1). Between 2000-2005, the total amount of stolen cash, about €6M in Sweden, made up ten per cent of the total value robbed in Europe; a large proportion given Sweden's relatively small population and economy. Furthermore, alongside Belgium, Sweden was the country that saw the most frequent use of automatic weapons and explosives in the hand of the robbers (Rossander, 2007; Anth Jacobsson, 2005; Dagens Nyheter, 2005).

[INSERT FIGURES 1 AND 2 ABOUT HERE]

Most aggravated robberies were not as large in scale as the Hallunda heist. However, only four days prior to that robbery, a cash depot was dramatically robbed with the help of a construction vehicle which crushed through the gates and a wall of the building. Iron caltrops had been spread in the surroundings prior to the robbery in order to slow down a police intervention. The masked gunmen got away with 26 million Swedish Kronor (€m) (Svea Court of Appeal, 2006b; Stockholm District Court, 2006). The spectacular August 2005 robberies were the last straw for stakeholders in the industry of transporting cash.

During the fall of 2005, the cash robbery problem spilled over to the society in general. The Swedish Transport Workers Union was concerned about the dangerous situation exposing personnel in security companies involved in cash management. As a result, in November 2005, they decided to temporarily stop the use of cash-in-transit vehicles from certain companies in the regions of Stockholm, Gothenburg, Skåne and Dalarna; a stop approved by the Swedish Work Environment Authority (Swedish Work Environment Authority, 2005). In other words, roughly half of the Swedish population lived in counties directly affected by these decisions. Large banks had to shut down up to half their ATMs due to cash shortage. The ATMs were shut down because money was running low, but many shops experienced the opposite problem: no cash-in-transit vehicles turned up to transport their cash depots, so suddenly the shops had to store much more cash than usual. Hence, the attempt to protect security guards had negative second-order effects. The stop was lifted after a couple of days, but lifting the stop was only done by the Swedish Work Environment Authority after a number of conditions had been fulfilled by the security companies. The authority demanded that the companies staff each transport with two guards, instead of one, in order to implement technologies to ensure the destruction of robbed bills and to limit the amount of cash transported in each van (Swedish Work Environment Authority, 2005; Ahlsén and Hennéus, 2005).

The years after the Hallunda heist saw a dramatic decrease in cash-in-transit and cash depot robberies: an 80 % drop in the amount of money taken between 2005 and 2007 (interview with Stoltz and Ek, 2011b; Wierup and Lisinski, 2007). Our own analysis also suggests that organised-spectacular robberies decreased in the following years. Although the total numbers are small to start with, they suggest a peak in the organised-spectacular robberies in 2005, after which they started to decline. From 2008 onward, such robberies occurred only 1-3 times each year (see Figure 2). It is evident that the criminal justice system

got an upper hand on developments. Below, key points of adaptation for the Swedish police will be accounted for.

### **Hemming in the Criminal Core**

While concerned parts of the Swedish police had information about individual cash-in-transit robberies, it turned out that the police had little systematic information about the heists. Thus, in November 2005, the Swedish National Bureau of Investigation organised a project called Nickel. The objective of the project was to identify who the perpetrators behind the robberies were and what their networks looked like as a first step to hem in a supposedly existing core of offenders. The Nickel group worked together with the National Prosecutors Office to get an overview of 355 reported robberies, attempted and accomplished, that took place during 2000-2005. They singled out 56 cases of special interest (The Swedish Prosecution Authority, 2006, p 81-82; Swedish National Council for Crime Prevention, 2009, p 122-127).

The Nickel project targeted the more organised robberies and started to map out the perpetrators, their criminal sentences, their backgrounds, and their networks. According to the police, there was a total amount of 600 persons involved in the loose, short-term networks that carried out the robberies in the studied period. Of those, there was a total hard core of about 50 persons responsible for key tasks such as planning, detonating explosive devices, and threatening vehicle crews with automatic weapons (interview with Stoltz and Ek, 2011b).

### **Reducing the Prospects for Successful Heists**

Another prioritisation that had to be made early on in the process was if the police should focus their efforts to retrieve the stolen cash, which is closer to the classic reactive police approach, or if they should centre their work on preventing money from being stolen in the first place, which would necessitate novel police methods to be employed. This also relates to

a discussion about whose job it primarily is to reduce robberies: the police or the companies that operate the cash-in-transit vehicles. For a short while during the fall of 2005, the police were escorting the most critical cash transports in order to make them safer.

The Nickel project put a lot of emphasis on cooperation with banks, security companies, technological companies, as well as the Riksbank (the Swedish Central Bank) in their efforts to make it harder to get to the money in the vehicles. There were debates concerning the most effective ways of improving the security between the police and the security companies. The discussions concerned to what extent the police and other authorities should force different companies to use a certain technology (specific ATM cassettes), with a certain effect, or if the police should leave the choice of technologies more up to the security companies. From the security companies' point of view, the police's approach increased costs and bureaucracy. After debating who had the main responsibility for curbing the robberies, the police could, with new legislation in hand (see below), persuade the security companies to make these changes. Hence, a number of target hardening technologies (Clarke, 1997) were implemented.

### **New Attempts to Retrieve Cash**

Cooperation was also initiated with the Enforcement Authority and the Swedish Tax Agency to increase the possibility to retrieve money after a robbery. International cooperation with Interpol and Europol took place. The police's reason for involving other Swedish authorities was the fact that organised criminal offenders often run small businesses in order to put up a legitimate front and to launder money. Such companies were often also be used to transfer money from Sweden to bank accounts abroad. The cooperating authorities investigated businesses run by suspected robbers in pursuit of stolen cash. The authorities looked for and then investigated other signs of criminal activities, which included people who on paper had

small financial resources but yet used and owned luxurious cars, boats and other expensive assets. However, cooperation between the police and the other authorities had a limited effect. Businesses run by suspected offenders seldom had suspicious assets, and in the investigated bank accounts the sums of money were often quite modest. Alternative: The reasons for this have already been discussed in this article; that is, perpetrators highly prioritise hiding the money from cash-in-transit robberies well out of the authorities' reach. Furthermore, the money that actually was stolen and later used by the offenders was often in the form of cash, which reduced the electronic trails often left by bank accounts and credit cards (interview with Stoltz and Ek, 2011b).

### **Influencing the Policy Process**

The police had an influence on the making of Law 2006:517, effective from 1 July 2006, concerning security companies. Among other things, the legislation defined what companies had to live up to in order to be authorised to transport money. The proposed legislation was referred to the police for consideration before it passed in Parliament (Law, 2006:517; Wierup, 2007a; interview with Stoltz and Ek, 2011b). To prevent the possibility of insider crime, security companies were stipulated to run background checks of employees and hire slightly older and more experienced personnel. Risk assessments were demanded. End-to-end systems where security guards could not access money while in transit, as well as GPS and alarms became mandatory technical tools. Adding to that, systems for the destruction of money in the event of a robbery became better. Previously, the colouring mechanisms did not assure permanent destruction, and consequently the coloured bills could be washed (literally) and used in different ways, e.g. in gas station and deposit machines (interviews with Stoltz and Ek, 2011a; b).

## **Field Testing**

The target hardening technologies were acquired and used, and safer tactics were implemented. The bills in an ATM cassette (money bag) became harder to come by, and the destruction of the bills became more certain. The improvement in the tactics of the security companies and the technical measures taken eventually made it harder to come by money. A period of learning and adaptation from both the security companies and the police, on the one hand, and from the robbers on the other, took place. Technologies and methods were implemented, then “field tested” by the robbers, then improved and fielded again. After a while it became clear that the technologies had become “good enough” and the money transports were reasonably safe. At the same time, other parts of society had changed as well. Machines accepting cash for payment became fewer, while the remaining ones became more sophisticated; thus, it became harder to use coloured or otherwise damaged bills in them (interviews with Stoltz and Ek, 2011a; b).

Cash-in-transit vehicle robberies are still attempted, but the chances of getting by a lot of unharmed money are slim. This resulted in a drop in the numbers of more organised robberies. The more organised offenders shifted focus away from robberies of cash-in-transit vehicles, and today the vast majority of attempted and realised robberies consist of what the police have defined as “sidewalk robberies”. Perpetrators carrying out these robberies seldom come by any large amount of money thanks to the improved safety in the money transports.

## **Epilogue: A Recent Upsurge of Cash Robberies**

Recently the Swedish police, and the Swedish society at large, found out the hard way that learning is a continuous and ongoing activity. This might especially be true for the police’s dealing with organised crime –offenders learn and adapt as well, and what might be seen as displacement effects occurred. The Nickel project was active between the years 2005-2007.

Since 2008, a National Robbery Coordinator has been responsible for coordinating the work against organised robberies in Sweden. A few years after the Nickel project had started to yield results in the work of the security companies and their money transports, bank robberies spiked. Offenders committing aggravated robberies had started to see the cash-in-transit vehicles as too difficult to rob compared with other targets. Due to a comparatively lower security level, banks became more interesting than before and armed bank robberies more than doubled to 114 during 2008, compared to the numbers hovering between 23 and 54 a year during the period 2000-2007. After implementation of up-to-date security technologies, an adaptation to the cash-in-transit realms, the bank robberies quickly decreased (Swedish National Council for Crime Prevention, 2011a, interview Stoltz and Ek, 2011b). Another displacement effect is that perpetrators on a few occasions carried out heists against cash-in-transit vehicles or cash depots in other Nordic countries.

Some of the most spectacular events of organised crime in Sweden in recent years, however, can also be seen as a displacement effect of the police work intended to increase the security of money transports. During 2009, cash depots were targeted on two different occasions. An attempted robbery of a cash depot in the northern part of Sweden was interrupted by the Special Task Unit, and a fierce fire fight ended with one of the robbers seriously wounded. The four robbers were arrested at the crime scene (National Bureau of Investigation, 2010a).

The fall of 2009 saw an even more spectacular event. Having learned that cash depots had an increased level of security in most aspects, robbers found a weak spot and landed a helicopter on the roof of a cash depot in Västberga, south of Stockholm. They forced their way into the building and later took off with a huge sum of money. The police were unable to use their own helicopters because of a bomb threat at the police helicopter base. Later, several robbers and their complicities were sentenced for the helicopter robbery, but the

cash still has not been retrieved (National Bureau of Investigation, 2010b; National Police Board, 2011a).

Despite these recent events, the development concerning robberies of cash-in-transit vehicles and of cash depots continues. Almost all of the robberies are on a low level in terms of planning and execution; that is, “sidewalk robberies” in which the robbers very seldom get to the money before it is destroyed. Spectacular and organised robberies are nowadays very rare; organised criminal offenders have moved on to other targets.

## **Analysis**

### **Symbolic Mustering of Exploitative Strength**

The wave of heists was to a large extent concentrated in the major cities in Sweden, in particular Stockholm. Patrolling police officers (local level) typically reacted to an alarm of an ongoing robbery, but arrived too late to intervene. In the cases where the police did arrive in time, they were sometimes confronted and threatened by heavily armed robbers and chose to retreat. After a while, more specialised units were sent to the scene, like SWAT teams and dog units (regional level), but often the robbers had almost always managed to escape. In those cases, a crime scene investigation would then be carried out by technicians, followed by an investigation by criminal detectives, led by a prosecutor (all at regional level). Therefore, a lot of the work on the robberies was carried out at the regional level, with a limited amount of intelligence-sharing at the national level (see also Wierup, 2007a; Wierup, 2007b). To a large extent, this can be seen as reactive, classic police work.

There are both advantages and disadvantages with this strategy. On the one hand, the reactive methods are controlled by the police and do not involve outsiders (e.g. technological and security companies). Furthermore, solid evidence of involvement in a robbery, such as

stolen cash, increases the likelihood for severe sentences. This may explain the police's objective to endorse a reactive approach to the spectacular robberies. On the other hand, the police knew from the start that the robbers would prioritise the cash they had stolen. A reason for a more proactive approach was to avoid exposing security guards and bystanders to the risks implied with a lot of money being transported in vans with a limited level of security (interviews with Stoltz and Ek, 2011a; b). However, offenders focused on robberies of cash-in-transit vehicles might avoid that particular crime and instead go after something else. And perpetrators arrested in the early stages of a heist, rather than later, might not be jailed for a long period of time, or sometimes not at all, and, thus, be able to continue to commit crimes. In this article, covering aggravated robberies, we have seen some of these effects as well.

The specialised project within the Swedish National Bureau of Investigation and their cooperation with the National Prosecutors Office indicated that the issue had gained prominence and that more resources were freed up for the sake of combating the crime pattern. Even though the cash robberies had not previously received much attention, the initial steps of the Nickel initiative were not novel. Rather, it was more a question of exploiting the existing repertoire. Systematically gathering, analysing and categorising data about cash-in-transit heists, the perpetrators behind them, their modus operandi, and their networks can be seen as refined and qualified criminal investigations. This is an advanced and resource intensive version of regular police work. Therefore, it is here seen as exploitation.

### **Exploratory Efforts Largely Externalised**

The wave of organised-spectacular robberies was curbed, as evidenced by the drop in organised-spectacular robberies (see Figure 2) and reduction in the amount of lost cash (interview with Stoltz and Ek, 2011b; Wierup and Lisinski, 2007). Even though the refined traditional police work was important, perhaps even decisive, for the curbing of the heist

wave, a few novelties were also introduced. The shift of focus implied by the preventive ambition to make it harder to take the money in the first place is worth mentioning as an indication of exploratory character. The police would of course still react to an on-going robbery and try to arrest the perpetrators, but overall the reactive approach had been tested with limited results. Robberies were carried out, people were put in harm's way, and the money was lost. Taken together, there were a number of reasons for the police to try to deal with the robberies in a more proactive way. Above all, the police needed to convince banks and security companies to improve their level of security; that is, to implement target hardening technologies.

Another novelty for the Swedish police at the time, which however did not produce tangible results, was the idea to involve other Swedish authorities, like the Enforcement Authority and the Swedish Tax Agency in an effort to retrieve stolen money from criminal offenders and small businesses run by persons suspected of criminal involvement. The limited results of these attempts highlight the potential downside of new, innovative approaches: the costs involved reflect the hopes more than actual results.

As argued theoretically, the uncertainty about the probabilities inherent in novelty is an explanation why organisations might hesitate to commit themselves to novel practices with perceived high alternative costs; what in this article is called exploration. In light of this, it is very interesting to observe that externalised police methods (involving other authorities forgoing after the money) has since become standard within the Swedish police work against organised crime. This is despite the fact that it seems to have produced few results when it comes to retrieving money from cash-in-transit robberies. In 2008, the Swedish Cabinet launched a national cooperation against "serious organised crime", involving the police at regional and national levels, as well as nine civil authorities, not least the before mentioned Enforcement Authority and the Swedish Tax Agency. Sharing information about suspects

available in the different authorities' registers is one key method. Going after the money is still the major strategy (National Police Board, 2011b), the results of which however remain to be seen.

The police reacted to the aggravated robberies by focusing part of the work with analysis and coordination to "Nickel", a time-restricted project at the national level with participation from the regional levels. Furthermore, the police cooperated with a range of other authorities as well; here, the police's role can be described as crime prevention consultants. One reason for this was that the police lacked an overview of the perpetrators behind the robberies. Much knowledge existed in the units and persons at regional levels that investigated specific crimes, especially so when several robberies were carried out in the same region; Stockholm was the region with the highest number of robberies. At the same time, robberies were conducted in other parts of Sweden as well. By moving parts of the analysis to the national level, the police would be able to gather intelligence about the robbers, their respective backgrounds and convictions to the same unit. Reaching outside the police, to other authorities, was early in the process seen as a way to work proactively by reducing the chances to get to the money in a hijacked cash-in-transit vehicle in the first place.

New legislation was implemented, the responsible authorities (other than the police) put pressure on security companies and banks, and new technologies and new methods were put in place. This can be seen as exploration. It is obvious that the police at this point aimed at getting to the core of the problem, which is a sign of double-loop learning. It implied operating outside their own territory and comfort zones; much pressure was put on other actors. The police could affect legislation, which in turn could be used to apply pressure on security companies. Furthermore, the police cooperated directly with security companies, banks, and technological companies. Therefore, this can also be seen as a case of externalised exploration.

### **Conclusion: Towards Ambidexterity?**

This article has tried to describe and explain how organised and/or spectacular robberies of cash-in-transit vehicles and cash depots in Sweden went from among the highest in Europe, with among the largest sums of money robbed (relative to Sweden's economy and population), to almost non-existent within just a few years (interview with Stoltz and Ek, 2011b; Wierup and Lisinski, 2007; see also Figure 2 above). We have argued that part of this decline can be explained by the police using a combination of classic police work in an exploitative way and of more qualitatively different work, often in close collaboration with others, in an explorative fashion. The Swedish police thus demonstrated an ambidextrous mix of exploration and exploitation.

We would like to point out a few lessons that we propose have a general bearing on learning and adaptation under pressure within the police. First, ambidexterity is foremost achieved externally. The exploratory work launched by the police was predominantly effectuated by outsiders. A key initiative was to add proactive, target hardening measures in order to make it harder to get to money transported in cash-in-transit vehicles, rather than only going for the stolen money. An obvious reason for this was the fact that when the robbers had taken a lot of money, the police very seldom managed to retrieve more than a small amount of it, if anything at all. And as long as the robbers could succeed in taking the money and hiding it from the authorities even if the robbers themselves got caught, there would continue to be huge incentives for perpetrators to try to rob cash-in-transit vehicles and cash depots. A stroke of double-loop learning, in other words reaching for the heart of the problem, was required to reach this position, which implied externalising this novelty. Here, an insight was that the police could achieve its goals better when acting as crime prevention consultants, rather than trying to solve the entire problem themselves.

Another lesson with a potentially general bearing for learning and adaptation under difficult conditions within the police is that the police arguably are wise in boosting their own reservoir of expertise and introducing novelty elsewhere. This is due to the resistance that the rank-and-file normally exhibit to changes initiated from the top within the police, or from outside police organisations. The leadership of the police organisation is well-served by exhibiting a certain level of personal ambidexterity. This can, however, also be seen as a form of differentiation as a means to achieving ambidexterity. The top level assumes the role of venturing into exploration, at the same time as it encourages the rank-and-file to exploitative excellence. In the case studied, the police obviously relied on classic police work as one of the methods for reducing cash-in-transit robberies. The standard operating procedures for the patrolling police officers first arriving at the scene of a robbery were scrutinised and improved, crime scene investigations were refined, the robbers and their networks were carefully analysed, and arrests of suspects were done, among other things. One of the differences, however, is that some of this was done in a more refined way than otherwise typically done; for example, by specifically recruiting criminal investigators and analysts to work full time on the Nickel project with more resources at hand and in a more systematic way.

When faced with harsh criticism for not coming to terms with an issue under their jurisdiction, the police organisation has to do more and be better at the same *and* introduce novelty. This requires a motivated rank-and-file and a leadership that does not shun exploratory endeavours outside their own organisation. This article has pointed out a few, potentially generic, ways in which ambidexterity can germinate in police organisations.

The venture into an organisational science approach to learning and adaptation has, little surprisingly, unveiled organisational nuances and qualities; the police organisation has been treated like the black box whose content renders the astounding outcome of this case

intelligible. The perspective has departed from the assumption that the police constitute an adaptive system, rather than questioning the police's capacity to learn at all. When organisational processes are made to matter, a different type of yardstick is added to the toolbox of police research. Instead of merely assessing learning by the outcome (often idealised), the organisational perspective points to factors that both foster and hamper learning and adaptation.

The findings in this article derive from one case, which was selected based on its more or less unexpected outcome. This does not necessarily increase the prospects for generalising the lessons discussed above, even though the results are in keeping with many insights that criminologists have unveiled regarding the police organisation. However, in order to further probe the ideas in the article, it would be highly interesting to expose them to other efforts to curb criminality. Contrasting cases of police efforts to learn and adapt with less successful outcomes would in particular be helpful in order to assess the value of the different aspects of ambidextrous learning. Comparative studies of police efforts for achieving ambidextrous learning and adaptation with other countries would evidently contribute to the general field of knowledge that is preoccupied with the police as an organisational phenomenon.

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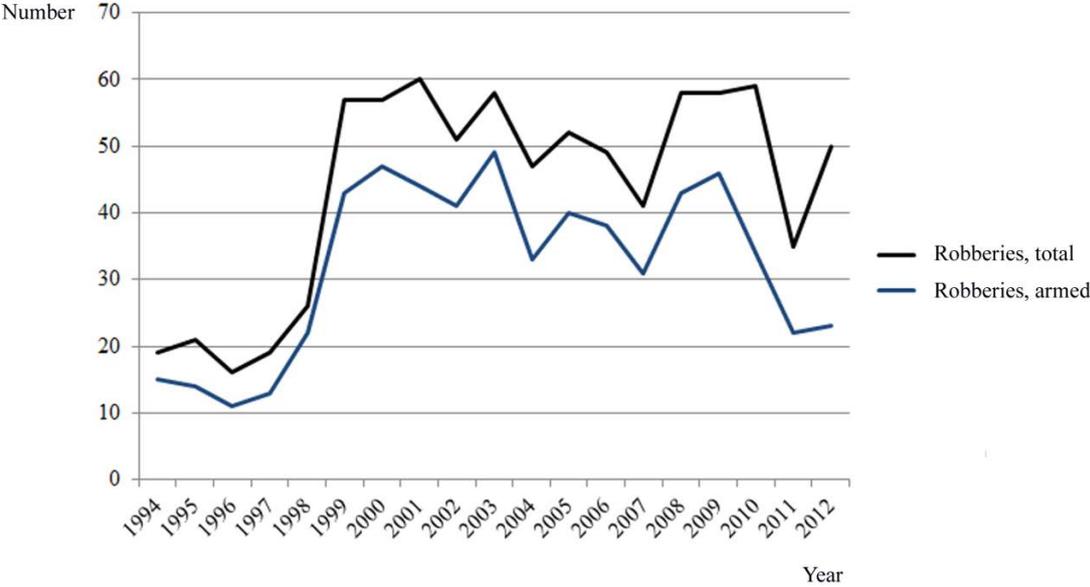
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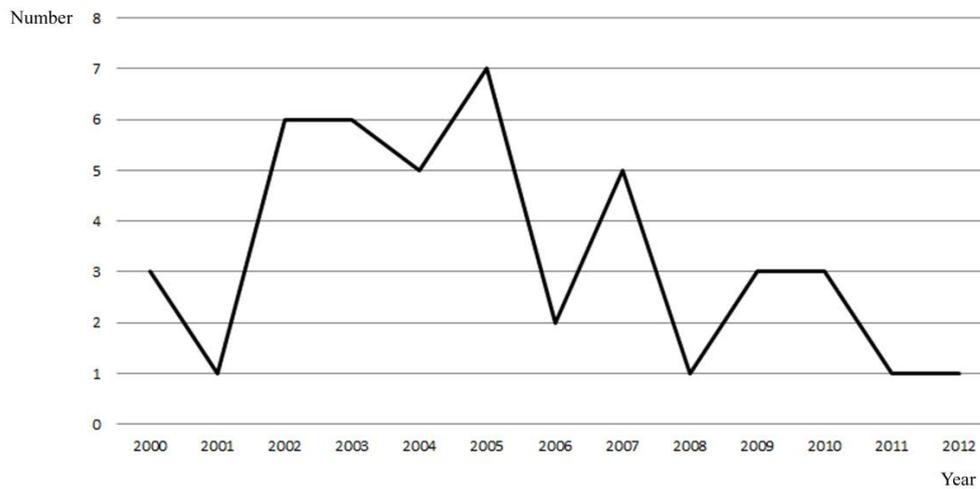
**FIGURE 1**



**Figure 1:** Robberies of cash-in-transit vehicles, and cash depots, in Sweden 1994-2012

(Source: Swedish National Council for Crime Prevention, 2013.)

FIGURE 2



**Figure 2:** Number of highly organised robberies.<sup>5</sup> (Source: Media content analysis 2000-2012, from the data base Retriever with the Swedish major daily newspapers and news agency.)

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<sup>5</sup> For the definition of highly organised robberies, see page 3 in this article. The media content analysis has been done using the data base Retriever with the Swedish major daily newspapers and news agency. The search terms used were the Swedish words for cash-in-transit vehicle and cash depot with an asterisk (\*) in order to also cover different endings of the terms. The (large number of) articles that emerged from the search were then scanned in order to determine whether or not the robberies described should be seen as organised or not, with the aforementioned definition in mind.