

Transferring criminal investigation methods from developed to developing nations

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This article examines the transfer of criminal investigation methods from developed to developing nations. We base our analysis on two general bodies of theory and research: policy transfer and institutional theory. Based on data from a study of a violent crime outbreak in Trinidad and Tobago, a small island developing state in the eastern Caribbean, we explore three efforts to import criminal investigation methods and techniques from developed nations. Our findings provide insights into the challenges faced by developing nations in acquiring crime control methods from developed nations and integrating these methods with their own.

Keywords: criminal investigation; policy transfer; institutional theory

Introduction

The idea of importing and exporting solutions from one jurisdiction to another is known as policy transfer, and it has been studied extensively by scholars from a variety of disciplines. Here, we draw on the policy transfer literature in exploring the import and export of criminal investigation technologies and practices from developed nations (particularly the USA, Canada, and the UK) to Trinidad and Tobago, a small, developing nation in the eastern Caribbean. We also draw on organisational theory, in particular institutional theory, to understand why organisations tend to copy one another. We find that criminal investigation practices are not easily transplanted from one context to another. Moreover, the motivation for transplanting these practices is not always purely instrumental. Sometimes practices are imported for their symbolic appeal as much as their substantive value.

Policy transfer

Policy transfer is the process by which policies in one time or place are used to establish policies in another time or place.¹ The policy transfer literature ‘emerged gradually’ from the comparative politics literature (Dolowitz and Marsh 1996, p. 344). For much of the twentieth century, the research on policy transfer was scattered, with a variety of terms used to describe the phenomenon, including ‘lesson drawing’ (Rose 1991), ‘policy convergence’ (Bennett 1991), ‘policy diffusion’ (Clark 1985) and ‘policy

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transfer' (Dommel 1990). A review of the literature by Dolowitz and Marsh (1996) synthesised this large and scattered body of research. Their review focused on several aspects of policy transfer, including the extent to which it is voluntary or coerced, the depth or extent to which a policy is transferred, the sources of policy transfer and the factors that enable or constrain policy transfer. Although the policy transfer literature has not been applied explicitly to criminal investigation, it has been applied to criminal justice more generally (Schacter 1991, Bissessar 2000, Jones and Newburn 2002, 2007, Robertson 2005). A small body of research has begun to focus on policy transfer from developed to developing nations (Hoekman *et al.* 2004, Gonzalez 2007). To date, very little research has examined policy transfer from developed to developing nations in the criminal justice sector (for exceptions, see Bissessar 2000, Robertson 2005).

Institutional theory

Institutional theory is a vibrant perspective that emerged initially from the study of organisations and then spread to other disciplines (Scott 1995, Maguire *in press*). It suggests that organisational change is not always motivated by rational/technical concerns with improving effectiveness and efficiency. Instead, organisations respond to their institutional environments, which are composed of powerful groups and institutions (called 'sovereigns') such as the media, politicians, public action groups and other influential external forces. These sovereigns control important resources for organisations, including not only tangible resources such as money but also less tangible resources such as legitimacy, reputation and prestige. Institutional theory views organisational attributes as 'manifestations of powerful institutional rules which function as highly rationalised myths that are binding on particular organisations' (Meyer and Rowan 1977, p. 343). According to institutional theory, legitimacy will be conferred on organisations that are structured and act in accordance with the expectations of their sovereigns (Scott 1995). Institutional theory has been applied fruitfully to the study of criminal justice organisations generally and police organisations specifically (e.g. Crank and Langworthy 1992, Maguire and King 2007, Maguire *in press*). We are not aware of any research that examines the influence of institutional environments on criminal investigation practices.

Institutional theory offers a potent framework for understanding why organisations within the same field tend to adopt similar structures and practices (Scott 1995, Maguire *in press*). Certain organisational forms come to be viewed as 'the right way' of doing things and deviations from those practices, regardless of whether they are more effective, can incur legitimacy costs for an organisation. According to DiMaggio and Powell (1983), three institutionalising or isomorphic forces lead organisations within a particular field to resemble one another more and more over time: coercive, mimetic and normative. Coercive isomorphism results from force or persuasion by institutions on which the organisation depends for its resources or survival. Mimetic isomorphism develops when organisations copy or imitate one another. Normative isomorphism results from pressure by professions and professional bodies. The language of policy transfer is not an explicit component of the institutional theory literature, but the very notion of organisational isomorphism – how organisations come to resemble one another more and more over time – is

consistent with the idea of policy transfer. Applying an institutional theory perspective to policy transfer suggests that organisations may adopt policies and practices from other nations – particularly developed nations – to enhance their own legitimacy, regardless of whether these changes improve effectiveness or efficiency.

Combining the approaches

A small body of research has combined ideas from the policy transfer and institutional theory literatures cross-nationally. For instance, a study of policy transfer in the European Union found a strong case ‘for combining policy transfer with the study of legitimacy mechanisms’ (Radaelli 2000, p. 38). Similarly, Ferner *et al.* (2005) found that legitimacy issues played a prominent role in the transfer of corporate diversity policies from the US firms to subsidiaries in the UK. Both literatures provide a useful framework for understanding the diffusion of crime control practices from one nation to another. The policy transfer literature provides a generic framework for considering the spread of innovations and ideas among political jurisdictions. The institutional theory literature offers a useful perspective for considering the conditions under which organisations and institutions adopt reforms, which reforms they adopt and how the adoption process unfolds.

Methods

The setting for this study is Trinidad and Tobago, a small island developing state in the eastern Caribbean. Between 1999 and 2009, Trinidad and Tobago experienced a dramatic increase in crime and violence.² Data for this paper were collected from December 2004 to July 2010 by a team of researchers working regularly in Trinidad and Tobago. Our work within the Trinidad and Tobago Police Service (TTPS) was sponsored by the Ministry of National Security, which allowed us unfettered access to all elements of Trinidad and Tobago’s criminal justice system and enabled us to collect a wide-ranging set of qualitative and quantitative data. In this paper, we rely primarily on qualitative data gathered from interviews and observations with police, crime laboratory and government officials.

We interviewed hundreds of employees from various units and divisions throughout the TTPS, including administrators, uniformed constables, general criminal investigators, homicide investigators, crime analysts and intelligence officers. In addition, we interviewed people from other criminal justice agencies, including the Ministry of National Security, the crime laboratory, the prisons, the courts and other defence and intelligence agencies. In addition, we conducted unsystematic observations primarily intended to familiarise the research team with the TTPS and its personnel. We accompanied task force officers and criminal investigators while they patrolled, investigated crimes, conducted searches, planned operations, interviewed victims and suspects and arrested offenders. We also attended homicide and shooting scenes, where we were given complete ‘insider’ access to all personnel and where we were able to speak briefly with witnesses as well as friends and family of the victims. We also toured the crime laboratory and observed forensic examiners carrying out their work. Finally, we examined five police evidence storage facilities, where we were able to study evidence storage practices in police stations. The field notes from these various interviews and observations

constitute the primary data source for this paper.³ We used ATLAS/ti qualitative data analysis software to organise, code and analyse our field notes and extract meaningful themes from the data (Ryan and Bernard 2000).

Three examples of policy transfer

In this section, we consider three criminal investigation reforms introduced in Trinidad and Tobago based on practices in Australia, Canada, the UK, and the USA. First, we consider two popular technologies and scientific methods used in criminal investigations: automated ballistic imaging and DNA profiling. Next, we consider efforts to restructure the Homicide Bureau of Investigations in the TTPS. All three reforms encountered substantial implementation problems. Viewing these problems through the lens of policy transfer and institutional theory reveals some interesting and meaningful patterns useful for thinking about criminal investigation reform.

Automated ballistic imaging

Firearms impose unique ‘toolmarks’ on shell casings and projectiles because harder metals tend to leave marks or imprints on softer metals with which they come into contact. These toolmarks can be used to match these items to one another and to match them to the firearm from which they were fired. This matching process can be done manually by firearms examiners with a comparison microscope, but the search process is inefficient, unwieldy and unlikely to result in matches for cases not already suspected to be related.

In 2004, Trinidad and Tobago’s Forensic Science Centre, the nation’s crime laboratory, procured an Integrated Ballistic Identification System (IBIS) for analysing ballistic evidence.⁴ IBIS enables analysts to perform an automated search for matches (also referred to as ‘correlations’), significantly reducing the search time for locating potential matches. Once the analyst identifies likely matches using IBIS, a firearms examiner must still manually confirm the match, using a comparison microscope, but adding IBIS makes the process more efficient. Police agencies and crime laboratories with expertise in the use of IBIS are often able to discover matches that would not, otherwise, have been found, especially in cases where the evidence is stored in different jurisdictions. A study in Boston found that IBIS ‘was associated with a more than sixfold increase in the monthly number of ballistics matches’. The authors concluded that ballistic imaging technology allows law enforcement agencies to make hits that would not have been possible using traditional ballistics methods (Braga and Pierce 2004, p. 1).

In the first 18 months after implementing IBIS, the crime laboratory in Trinidad and Tobago did not confirm any correlations. After 26 months, it had still confirmed only 11 correlations (Forensic Technology, Inc. 2007, King and Wells 2008). The major reason the lab was unable to identify more correlations was a crushing backlog of firearms and ballistic evidence awaiting processing. A 2005 report estimated the size of the firearms and ballistic evidence backlog at 2058 cases (King and Maguire 2005). The lab responded to the firearms backlog by hiring new local firearms examiners and bringing in British and American firearms examiners on short-term contracts. The foreign firearms examiners outperformed the local examiners

significantly and were able to eliminate the backlog, though once their contracts expired, it began to build up again (King and Wells 2008). Once the backlog was reduced, many more criminal firearms cases were input into IBIS, which 'produced an impressive number of firearms correlations' (King and Snipes 2008, p. 3). By February 2008, IBIS had produced 337 correlations.

When the crime lab in Trinidad and Tobago identifies a correlation, the analysts compile the information into an IBIS correlation report that describes the evidence and the cases to which it is connected. For instance, an IBIS report might note that shell casings from a seized firearm that was test fired at the laboratory match shell casings found at an earlier homicide scene. These reports are then sent to the Homicide Bureau of Investigations (hereafter, referred to as 'the homicide unit') in the TTPS. The homicide unit is then supposed to route the correlation report to the officers who originally submitted the evidence to the lab (King and Wells 2008).

We obtained a sample of 33 of the 337 IBIS correlation reports produced by February 2008. Some of the crimes listed in these reports had occurred several years prior to the release of the IBIS report. For example, an IBIS report from February 2007 showed that a murder in January 2003 and a gun possession case from February 2003 involved the same gun (King and Wells 2008). Another linked two cases that were almost 10 years old. According to King and Wells (2008, p. 8), 'of the 71 offences appearing in the correlation reports with occurrence dates...one was reported to occur in 2007, 13 in 2006, 14 in 2005, 27 in 2004, and the remaining 16 offences took place prior to 2004'. The average time between submission of evidence and the production of an IBIS report for the incidents we examined was about 2.5 years (mean = 850 days, median = 863 days). The ballistic evidence backlog at the crime laboratory prevented the firearms analysts from generating timely information useful for investigators and, therefore, presumably allowed violent offenders to remain on the streets.

We tracked the flow of 19 IBIS reports from the crime laboratory to the TTPS. In 37% ($n=7$) of the cases, the IBIS report the crime laboratory produced did not list the correct investigator according to our interviews with investigators. Due to confusion over case assignments, we were not able to determine whether the correct investigator was listed on the report in another 31% ($n=6$) of the cases we analysed. We determined definitively that the IBIS report listed the correct investigator in only 31% ($n=6$) of these cases.

Our general conclusion from interviewing homicide investigators, Criminal Investigation Division (CID) investigators and administrators is that the police were not using the IBIS reports. In many cases, the investigators never received the reports, and in other cases, the investigators did not know what to do with them. In other words, the IBIS technology was not employed with a full understanding of how the information it generates should be used and by whom. Forensic Technology, Inc., the company that manufactures IBIS, uses the metaphor of a three-legged stool to stress the importance of aligning people, processes and technology to establish a coherent system for investigating gun crimes: 'Finding the right combination of people, processes, and technology and applying it in a properly balanced manner requires a deliberated and collaborative effort on the part of all stakeholders...' (Gagliardi 2010, p. 25). This kind of cohesive, systemic perspective had not been implemented in Trinidad and Tobago at the time of our research.

DNA profiling

DNA profiling (also known as DNA fingerprinting) has become a major investigative tool in many nations. The use of DNA in criminal investigations was made possible due to a breakthrough in research by British geneticist Alec Jeffreys and his colleagues in 1984 (Jeffreys *et al.* 1985a, p. 67). Their discovery led quickly to the idea of DNA fingerprinting and its forensic applications in criminal investigations (Gill *et al.* 1985, Jeffreys *et al.* 1985b). The first use of DNA profiling in a criminal investigation came in 1986, when DNA was used to help convict a suspect for a double rape and murder in the UK (Jobling and Gill 2004). Since then, forensic DNA analysis has gained 'worldwide public and professional acceptance as a reliable means of individual identification and has had a major impact on criminal justice systems' (Jobling and Gill 2004, p. 744).

In 2000, Trinidad and Tobago's parliament passed a DNA law modelled after a similar law in Australia. Many people expressed concerns about the law, but the government did not take these concerns seriously. Five years later, a senior government official said the DNA legislation they chose 'was unworkable even in Australia' and that they were 'now looking to the UK to find a way forward on the matter' (*Trinidad and Tobago's Newsday* 2005). New DNA legislation was then passed in 2007 with the help of a forensic science adviser from the UK. At the time, the government's opposition leader expressed apprehension that little was known about 'when the infrastructure necessary for the implementation of the Act would be in place' and whether 'the Act would become another piece of legislation on the Statute books which is not implemented' (Taitt 2007). More than a decade after the first law was passed, significant trepidation about the DNA legislation remained. A 2011 newspaper editorial referred to the 2000 and 2007 DNA Acts as 'deficient legislation' (*Trinidad and Tobago's Newsday* 2011).

During our observations, the crime laboratory in Trinidad and Tobago was actively building a DNA lab and training employees in DNA analysis. DNA analysis is a technologically sophisticated process, and like any kind of organisational technology, it requires inputs and produces outputs. The inputs of a DNA analysis are evidentiary samples such as blood, urine, saliva, hair or objects containing traces of these kinds of items (such as clothing, weapons, etc.). The accuracy of a DNA analysis depends on the extent to which these inputs are collected and packaged carefully without any form of contamination. For instance, a British crime laboratory discovered that it had DNA samples from employees who worked at the plant that produced the test tubes and other glass vessels that the lab used in its DNA processing. People working at the plant that produced these test tubes unwittingly left microscopic samples of their own DNA in the test tubes simply by handling them carelessly (Forensic Science Service 2004). The police and crime-scene personnel who collect DNA evidence and the crime-laboratory personnel who process it sometimes also end up leaving their own DNA in samples the lab processes. Given these issues with biological contamination of DNA samples in controlled lab settings, technicians who gather, transport and store DNA evidence must be properly trained and equipped. Deploying these kinds of sensitive technologies requires a serious investment in supportive structures, processes and systems.

Our observations indicated that the crime laboratory in Trinidad and Tobago possessed the lab equipment necessary to analyse DNA. Yet the chain of custody of

DNA evidence from the crime scene to the lab was fraught with sources of contamination and degradation. Crime scenes, including homicide scenes, were rarely secured. Police officers infrequently used crime-scene tape to secure scenes, and we observed civilian bystanders wandering through homicide scenes, standing near murder victims and, in some cases, inadvertently compromising physical evidence. We also observed police officers failing to observe the most basic kinds of crime-scene protocol at homicide scenes, in one case, stepping on spent shell casings the shooters left and, in another case, allowing a clear bloody footprint (presumably left by a suspect) to be obliterated. We regularly heard stories of improperly packaged physical evidence, such as guns delivered in fast-food restaurant bags and arson evidence from a suspect packaged in the same bag as the accelerant containers police officers gathered at the crime scene.

In addition, biological evidence (such as blood and semen samples) is usually air-dried prior to storage or submission to a lab for analysis (Fisher 2004). In Trinidad and Tobago, police stations lacked equipment, space and reliable processes for securely air-drying biological evidence, such as bloody or semen-stained items. Even when a corner of an office had been designated as the drying area, these areas were not secure and were subject to various sources of contamination.

Facilities for storing evidence were even worse. We visited five police evidence storage facilities and found that some had no electric lights, four of the five were open to the outside air (and thus the heat and humidity), and one was prone to periodic flooding. Evidence was stacked haphazardly on shelves and, sometimes, heaped on the floor in a disorganised jumble. Appending a sensitive technology like DNA profiling to a system lacking the most basic evidence processing standards is a recipe for unintended consequences.

Restructuring the homicide unit

In early 2005, Trinidad and Tobago's Ministry of National Security contracted with a team of American research partners to diagnose the causes of the nation's violence outbreak and to recommend potential solutions.⁵ These advisers released a series of reports that focused on both external conditions (such as gangs, guns and drugs) and internal conditions (such as the capacity of the police and the crime lab) associated with the violence. One of the first reports the advisers released proposed a radical restructuring and expansion of the homicide unit (Katz and Maguire 2005). As Figures 1 and 2 illustrate, the number of homicides in Trinidad and Tobago had increased dramatically, while the number of homicide clearances remained relatively stable. As a result, homicide clearance rates dropped precipitously for seven years in a row. Research shows that the dramatic increase in homicide was due to young men killing one another with guns, primarily as a result of gang conflict (Maguire, *et al.*, 2008, St. Bernard 2010). Since gang homicides are more difficult than other types of homicides for police to solve, the increase in gang homicides interacted with other factors to generate the significant drop in homicide clearance rates (Maguire *et al.* 2010).

The advisers' report emphasised three potential consequences of the nation's low homicide clearance rate. First, violent offenders were not being incapacitated and, therefore, were free to continue harming other people. Second, citizens perceived that there were few consequences for their actions and, therefore, believed they could

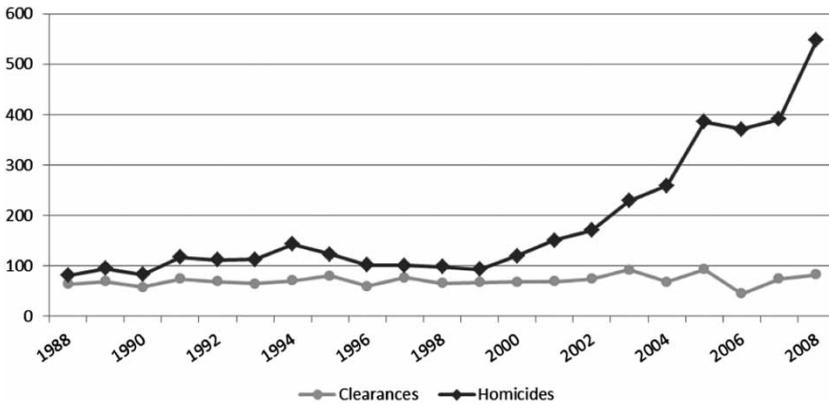


Figure 1. Homicides and clearances, 1988–2008.

murder with impunity. Third, the public failed to perceive a sense of ‘just deserts’ because offenders were so often not brought to justice for their crimes.

By failing to identify, apprehend, incapacitate and deter offenders, the criminal justice system in Trinidad and Tobago very likely contributed to the alarming increase in the homicide rate.⁶ Furthermore, research on general deterrence suggests that potential offenders are often aware of the risk of apprehension; thus, failing to apprehend and convict murderers may send the message (especially to criminal street gangs and other active offenders) that people can get away with murder (Kennedy 2008). A senior police official told us in 2005 that warring street gangs ‘are continuing to assassinate one another, and they are doing it because they are confident that the police are not going to catch them’. As homicides continued to increase, the sheer volume of murders overburdened the police, the crime laboratory and the courts and further reduced their capacity to handle the burgeoning violence. It was a vicious cycle (Maguire, *et al.* 2010).

Before late 2005, the responsibility for homicide investigations was fragmented among different units. Homicides were generally investigated by local CID investigators housed at local police stations. In some cases, investigators from the



Figure 2. Homicide clearance rates, 1988–2008.

homicide unit were enlisted to assist in the investigation, but homicide investigators generally did not have primary responsibility for investigating all homicides in the country. The American advisers were surprised to discover that no single individual was ultimately responsible or accountable for a homicide investigation. A generalist station house (CID) investigator would typically take the lead, with a homicide investigator playing an auxiliary role to assist in the investigation when asked. A CID investigator has one chain of command, and a homicide investigator has another. The advisers concluded that 'these unclear structures and processes serve as significant obstacles to the successful investigation of homicides in Trinidad and Tobago' (Katz and Maguire 2005, p. 3). Research on homicide clearance rates in Trinidad concluded that this fragmented system of investigating homicides sufficed when the country's homicide rate was low, but the system quickly became overwhelmed by the outbreak of violence that began in the late 1990s (Maguire, *et al.* 2010).

The American advisers recommended forming a full-service homicide unit that would have centralised responsibility for all homicide investigations in Trinidad and Tobago. They also recommended new structures and processes that would address the 'near complete absence of accountability' in homicide investigations (Katz and Maguire 2005, p. 9). Finally, they recommended increasing the size of the homicide unit from 41 to 140 officers. In short, under this plan, the homicide unit would be invigorated with manpower, resources, leadership and training.

On the surface, the advisers' recommendations were acted upon hastily. The Ministry of National Security prepared a Cabinet Note authorising the proposed changes at the nation's highest levels of government. The homicide unit was placed under the command of a higher-ranking police official (an assistant commissioner of police rather than a senior superintendent) based on the advisers' recommendations. A highly regarded inspector from the homicide unit was assigned full-time to implement the recommendations and serve as the official liaison between his unit and the American advisers. New investigators were transferred to the homicide unit within a matter of weeks and investigators were assigned to the newly formed regional homicide offices. Additional space was acquired, and old space was renovated to house the reorganised homicide unit. New investigators received brief introductory training in homicide investigation from American trainers, including some training from the Federal Bureau of Investigation (FBI). The reorganisation plan did not seem to generate any obvious resistance. The Ministry of National Security and the Trinidad and Tobago Police Service accepted the proposed recommendations and appeared to act quickly in implementing them. However, as is often the case in policy transfer, the proposed reorganisation was implemented more on the surface than in reality.

Four important variables influenced this eventual implementation failure. First, though the TTPS acted hastily in transferring people into the new homicide unit, they did so without regard for the qualifications of these people to carry out homicide investigations. Many of the people transferred into the unit had no previous investigative experience. Moreover, while the new homicide investigators were provided with a brief introductory training course (lasting only 2.5 days), the TTPS did not provide them with the more substantial training they needed to perform homicide investigations competently.

Second, the liaison who was assigned full time to assist with implementation was saddled with other duties and, therefore, ended up not being available to do the painstaking work of translating the proposed reforms into reality. Organisational change efforts benefit significantly from having an internal 'champion' with the time and influence to establish the momentum for change. For instance, a report on violence reduction efforts in the USA concluded that having a full-time project director is 'critical to success and sustainment' (Dalton 2003, p. 19). When the TTPS overloaded the liaison with ancillary duties, they unintentionally undermined the capacity of the homicide unit to implement the proposed reforms.

Third, as the new unit was being established, some homicide officials began to resist outside influence. The resistance focused primarily on the proposed case assignment and accountability systems for ensuring that cases were being investigated thoroughly. In fall 2005, a homicide official told the advisers, 'If you try to impose an American model, it will not work – you need to tweak it for Trinidad and Tobago'. Foreign advisers often face a difficult choice in such circumstances – whether to push their agenda in spite of local resistance or to turn over the responsibility for implementation to the locals. The American advisers chose the latter option. They then quickly lost influence in the newly reorganised homicide unit once the new investigators were hired and trained and the new leadership of the unit was installed.

Finally, the reorganisation was implemented without fidelity to the original plan. The foreign advisers had recommended a system of case assignment, supervision, accountability and performance measurement. Once the unit was left to its own devices to execute the vital details of the plan, virtually nothing happened. These administrative details represented novel concepts for police officials used to the more laissez-faire style of management common in Trinidad and Tobago (and the Caribbean more generally). The lack of supervision, management and accountability took its toll in a newly formed unit consisting of employees who had not worked together before and who lacked a work-group culture used to addressing problem performance or rewarding success and apprehending criminals.

The indicators of failure in homicide investigations were visible, unequivocal and widely known. After the reorganisation of the homicide unit, the clearance rate (the proportion of cases in which a suspect is arrested) dropped even further. During this same period, the number of homicides increased from 386 in 2005 to 547 in 2008. Then, in September 2008, the Ministry transferred the responsibility for investigating gang homicides from the TTPS to another agency.⁷

Our interviews with homicide investigators three and four years after the reorganisation concluded that the homicide unit 'lack[ed] management and supervision, training, investigative follow-through and documentation, and a culture that values and rewards success' (King *et al.* 2010, p. 1). The performance of investigators was not recorded, analysed or rewarded by supervisors. Unsuccessful investigators (some of whom had never arrested a homicide suspect in three or four years) were not coached, counselled or transferred to other assignments. Aggressive, innovative and successful homicide investigators were not recognised or rewarded. The homicide unit had no system or methods for measuring performance, rewarding excellence or ameliorating poor performance. The adoption of a larger, restructured homicide unit was symbolically attractive and popular. Ultimately, however, this reform was doomed to fail because the structures necessary for it to succeed were

never taken seriously. Importantly, these administrative issues were not unique to the homicide unit; they were endemic throughout the TTPS during the research period (Mastrofski and Lum 2008).

Discussion

Understanding the transfer of criminal investigation methods into Trinidad and Tobago means paying close attention to the network of agencies (and units within agencies) responsible for pieces of the criminal investigation process as well as the agency that oversees them. The Ministry of National Security has no direct role in investigations, but it oversees all law enforcement agencies in the nation as well as the crime laboratory. The mandate and funding for criminal investigation reforms comes primarily from the ministry. The nation's principal law enforcement agency is the TTPS, which houses regional CID offices, the Homicide Bureau of Investigations and several other units with specialised criminal investigation responsibilities. The newly established (at the time) Special Anti-Crime Unit of Trinidad and Tobago (SAUTT), a separate agency within the Ministry of National Security, also handled some types of investigations. The crime laboratory plays a significant role as the agency that performs forensic analyses, including both ballistic imaging and DNA profiling. Understanding the full range of interagency dynamics among these agencies (and among units within them) is beyond the scope of this paper, but some of these dynamics play an important role in criminal investigation reform and policy transfer.

Improving criminal investigations is not simply a matter of adopting new technologies or altering structures and practices within a single agency (Maguire *et al.* 2010). Large-scale reforms must take place within and among multiple interdependent agencies to be effective. Ballistic imaging and DNA analyses take place in the crime laboratory. However, the evidence submitted for these kinds of analyses is typically discovered, secured, packaged and delivered to the crime laboratory by the TTPS (or SAUTT). The success of automated ballistic imaging and DNA profiling depends not only on the performance of individual agencies but also on the ability of these agencies to work together. For example, in instances where ballistic evidence must be reanalysed using a comparison microscope, the investigator must return the evidence to the crime laboratory for the analysis. These types of interagency dependencies require considerable communication and coordination.

Ballistic imaging and DNA processing served as powerful signs that the criminal justice system was taking the outbreak of violence seriously. Security officials were regularly on the lookout for technologies they could purchase or prepackaged programmes they could institute to help them address the crime problem and to help them convince the public they were committed to preventing crime. IBIS and DNA provided them with a powerful message for a frightened public demanding immediate action. Both technologies carried with them the prestige conferred from their widespread adoption in the scientifically advanced, industrialised, developed nations that policy-makers in developing nations regularly look to for solutions to their problems. On the surface, technological innovations such as ballistic imaging and DNA profiling appear relatively easy to import and 'plug in' to existing operations. Buying them has powerful symbolic appeal and enables officials to

portray themselves and their administration as innovative. However, these innovations rely heavily on people and systems for their success.

Technology is not the silver bullet solution that many of the people we interviewed perceived it to be. If attempts to adopt advanced technology ignore the context in which it will be implemented – including the politics, power structures, culture and norms– they will fail. As Jones and Newburn (2007, p. 161) argue, ‘It is significantly easier for symbols to be exported and imported than it is for matters of substance to be transferred’. A British adviser hired by the Ministry of National Security made this point at a meeting of high-level security officials when he said, ‘If effective investigative policies and procedures are in place, then DNA should be the icing on the cake’. Instead, IBIS and DNA were perceived as the cake itself.

The restructuring of the homicide unit ultimately fell victim to similar dynamics. Hiring new investigators, providing them with brief introductory training and placing them in refurbished facilities constitute visible measures that appeal to constituents. But they are hollow gestures without more advanced training and without the various structures, processes and accountability mechanisms necessary to ensure solid, reliable investigative performance.

Implications for theory

The patterns we observed are consistent with the literature on policy transfer and institutional theory. All three reforms held strong symbolic appeal for local politicians and police and forensic officials. Public officials frequently mentioned IBIS, DNA and the reorganisation of the homicide unit in press releases, interviews and parliamentary debates.⁸ Officials embraced these reforms with vigour for two reasons. First, they represented potential solutions to the burgeoning growth in violence. Officials invested significant faith in these solutions, viewing them as quick fixes that would solve the nation’s problems. In the language of institutional theory, these reforms had strong *symbolic* appeal beyond their obvious *technical* appeal for potentially increasing police effectiveness. As the homicide count continued to grow, officials were under intense daily pressure from the media and the public and these reforms helped to appease constituents.

In all three examples, the initial attempt at policy transfer met virtually no resistance on the surface. This surface-level acceptance of reform has its roots in both technical and symbolic motives. Officials responsible for adopting policy transfer hoped to find an effective solution to the problem, but they also derived legitimacy from their decisions to implement tangible technologies and structures co-opted from developed nations. When nations consider adopting reforms from other nations, the initial policy transfer decision may depend as much on the reform’s symbolic value as on its technical appeal. Reforms that don’t contain both ingredients are less likely to get adopted.

Beneath the surface of the initial policy transfer decision lies a much more challenging and complex level of reform. If policies are not implemented thoroughly and with fidelity at this deeper level, they are likely to fail, often for mundane reasons. As Pressman and Wildavsky (1979) note, ‘perfectly ordinary circumstances present serious obstacles to implementation...’ (p. xviii). Reviewing the enormous literature on implementation is beyond the scope of this article, but two generic lessons from this scholarship are apropos here. First, ‘programmes don’t implement

themselves' (Fixsen *et al.* 2011). Even the most sensible and appealing plans require significant leadership, commitment and hard work to be implemented thoroughly and with fidelity.

Second, what often looks like resistance to reform may simply be a lack of knowledge or ability among street-level bureaucrats to carry out the proposed reforms (Hill 2003, p. 278). There is a tendency to attribute all implementation failure to active resistance on the part of organisations and their employees. Resistance to reform was certainly *part* of the explanation for implementation failure in one of the three reforms we discussed. However, the more important lesson here is that managers often don't know how to execute the nuts and bolts of implementation. All three of the reforms discussed in this chapter failed because they were not successfully integrated into the cultural and organisational systems that ultimately define the success or failure of reform efforts. For reformers interested in policy transfer that achieves something more than a symbolic victory, the key challenge is determining how to integrate structural, strategic or technical reforms into organisational and cultural systems. The initial policy transfer decision is easy compared to the much more difficult work of implementing and institutionalising the newly transferred policies in practice.

During our research, IBIS, DNA and the restructuring of homicide investigations did not struggle because they were bad ideas. They struggled because they were not supported by the proper alignment among people, processes, structures and technologies. As Jones and Newburn (2007, p. 162) argue:

policies cannot easily be packaged, put in a container, transported to a new location, and then simply become embedded and established in the new setting . . . rhetoric, labels, and nomenclature travel much more easily than the nuts and bolts of policy.

Effective policy transfer means that a policy must survive not only the initial adoption decision but also the more complex process of integrating the new policy into existing operations.

Notes

1. We use the term 'policy' loosely to include structures, policies, administrative arrangements, technologies, programmes and practices.
2. From 1999 to 2008, the number of homicides per year in Trinidad and Tobago rose by 488% (from 93 to 547). In 2009, the number of homicides dropped slightly (to 511).
3. Itemising the list of interviews and observations in this study is more complex than usual because the larger project under which it was carried out involved dozens of smaller projects, many focused on research and some focused on training and technical assistance. Thus our interviews and observations often served multiple purposes for different projects. Reporting all of the interviews and observations we carried out during the six-year project would be misleading since many of them were unrelated to this specific study. However, much of the information reported in this article was gathered during the early part of the project (December 2004–March 2006) when most of our work was still directly relevant to this study. During that period, we carried out 242 interviews, including 131 interviews with employees throughout the TTPS; 52 interviews with people from other criminal justice agencies (including the Ministry of National Security, the crime laboratory, the prisons, the courts and other defence and intelligence agencies); 21 interviews with people from other government agencies; 7 interviews with gang members and 31 interviews with others. These interviews fell in the middle of the continuum between unstructured and semi-structured in

the sense that the research team was focused on four specific themes: the nature and causes of the nation's outbreak of violence; the institutional capacity of the police and other agencies to address the violence; the internal and external causes of the violence and the role and experiences of the person being interviewed in relation to the violence problem. For more details, see Maguire *et al.* (2010).

4. IBIS is manufactured by a Canadian company, Forensic Technology, Inc., and has been implemented throughout the world. It forms the basis of the National Integrated Ballistic Information Network (NIBIN) run by the Bureau of Alcohol, Tobacco, Firearms and Explosives in the USA.
5. The first author led this advisory team, and the second author was a member of the team assigned to examine criminal investigation and forensic evidence processing issues.
6. Addressing the full range of causal factors that influenced recent homicide trends in Trinidad and Tobago is beyond the scope of this article. Scholars have proffered several explanations, some focusing on proximate causes and some on more distal causes (e.g. Agozino, *et al.* 2009; Greenberg and Agozino 2012; Katz, *et al.* 2011; Maguire *et al.* 2008; St. Bernard 2010).
7. The Special Anti-Crime Unit of Trinidad and Tobago (SAUTT) was a standalone law enforcement agency established in 2003 to investigate crimes of national significance and to assist other agencies in Trinidad and Tobago. In 2006, SAUTT hired 39 British police officers to help build SAUTT's intelligence and investigative capacity. As it became increasingly clear that the TTPS's homicide unit was overwhelmed by the number of gang homicides, the government assigned responsibility for investigating these homicides to SAUTT under the tutelage of the British advisers. SAUTT was disbanded in August 2011.
8. <http://www.ttparliament.org/hansards/hs20061220.pdf>.

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