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PROBLEM-ORIENTED PUBLIC POLICIES: REDUCING URBAN VIOLENCE IN RIO DE JANEIRO
A CASE STUDY

T E S I N A

PRESENTADA COMO REQUISITO PARCIAL PARA
OBTENER EL GRADO ACADEMICO DE:

MAESTRO EN ADMINISTRACION PUBLICA
Y POLITICA PUBLICA

POR:
PATRICIO RODRIGO ESTEVEZ SOTO

MONTERREY, N. L. DICIEMBRE 2011

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RECTORIA DE ESCUELAS NACIONALES DE POSGRADO EGADE BUSINESS SCHOOL Y EGAP GOBIERNO Y POLÍTICA PUBLICA.

Los miembros del comité de tesina recomendamos que el presente proyecto de tesina presentado por el Lic. Patricio Rodrigo Estévez Soto sea aceptado como requisito parcial para obtener el grado académico de:

Maestro en Administración Pública y Política Pública

Comité de Tesina:

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Abstract

This thesis is a case study of Rio de Janeiro's use of Pacifying Police Units to reduce its problem of urban violence. By using this tool, the research tries to answer *how can problem-oriented public policies reduce urban violence.* The case is supported by theories of crime prevention and policing innovation, mainly problem-oriented policing and operational harm-reduction. With this insight, public security policies are understood as scientific means to solve social ills.

The case study was done with data from in-depth interviews, documentary research and ethnographic observations collected during a research visit to Rio de Janeiro in July, 2011.

The case study is also made to generate lessons that may help cities and practitioners deal with problems of urban violence in a more effective way. The main lessons are that (1) the problem-oriented approach can successfully reduce urban violence; (2) the approach requires a proper institutional framework; (3) human resources with appropriate competences are vital; (4) political will and leadership are essential; and (5) the problem-oriented mode of thought is paramount.

For Javier Francisco Arredondo Verdugo and Jorge Antonio Mercado Alonso.

Fellow graduate students, whose untimely death inspired my passion for public policy.

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Introduction

There are no easy solutions to the problem of urban violence. While the problem has been the focus of public policy for a long time, solutions remain elusive. Some cities have been successful in controlling their violence problems using specific policies, and yet, those same strategies have been ineffective in other cities. This phenomenon means that less emphasis should be placed on which specific policies are effective for violence reduction, and more on *how public policies should be thought of* to achieve a reduction in urban violence. This thesis was written as an attempt to generate knowledge that can help answer that question.

The research subject selected to answer this question is Rio de Janeiro's recent experience in urban violence reduction. This reduction has been achieved by pacifying violent slums (*favelas*) with special police units called *Unidades de Polícia Pacificadora* (Pacifying Police Units – UPPs).

Rio de Janeiro is notorious for being one of the most violent cities in the world. It is also the epitomization of what Koonings and Kruijt (2007) termed a "fractured city": a phenomenon common in Latin America in which a city is divided between 'normal' urban areas and zones characterized by violent social exclusion. Thus, considering the harrowing levels of violence in the city, the recent policy initiatives that have been implemented to reduce urban violence hold great promise to other cities throughout the region that face similar challenges.

This subject was also selected because it is, arguably, one of the world's most recent and publicized successful public policy experiments regarding urban violence reduction. And while some observers have already heralded UPPs as a solution that should be replicated in other cities facing similar problems, little is known about how the policy actually works. Thus, by doing this case study, the goal was to unravel the logic that explains how the policy was thought of and developed. With that knowledge, specific lessons were generated that can help other cities develop their own public policies for urban violence reduction.

This thesis utilized abductive logic to reach its conclusions. The traditional deductive process that dominates social science departs from an established theory and uses data to either prove or disprove the theory. Abductive logic, on the other hand, follows an ordinary process of discovery rooted in pragmatism. This process, more common in the natural sciences, urges to observe the subject and then generate theories and hypothesis, which in turn beget further observations (Sparrow, 2011). It is akin to the work done in medicine, where the human body was first studied and dissected before it could be understood. As explained by Charles Sanders Peirce (1903):

> A mass of facts is before us. We go through them. We examine them. We find them a confused snarl, an impenetrable jungle. We are unable to hold them in our minds. We

> endeavor to set them down upon paper; but they seem so multiplex intricate that we can neither satisfy ourselves that what we have set down represents the facts, nor can we get any clear idea of what it is that we have set down. But suddenly, while we are pouring over our digest of the facts and are endeavoring to set them into order, it occurs to us that if we were to assume something to be true that we do not know to be true, these facts would arrange themselves luminously.

Following abductive reasoning, the research for this thesis began with the observation of relevant data for constructing the case study. The data collected suggested that the research fell within the literature of policing innovations – particularly problem-oriented policing (Goldstein, 1979) – and operational harm-reduction (Sparrow, 2008). This literature, in turn, led to Lasswell's (1971) understanding of public policy as the scientific process of solving public problems.

In sum, this meant that the case study should be based upon the problem-oriented approach. This approach focuses on the need to understand the processes behind decision-making and policy formulation, rather than studying policies as stand-alone products of a 'black box'. The relevant information is how the black box works, which relates to modes of thought, to how problems are thought of. Thus, by building Rio de Janeiro's case around these frameworks, it is possi-

ble to explain how Rio's policy-makers thought about their city's problem of urban violence, and therefore understand how the UPP policy works.

Ultimately, the knowledge gained from the case study is intended to aid practitioners to solve problems of urban violence. This unity between theory and practice must not be seen as science informing policy makers on what they should do, which would presuppose that social scientists are in a privileged position regarding policy practitioners. According to these epistemic principles, theory and practice are one and the same thing and any attempt to divide them is artificial (Dewey, 1933). Thus, instead of viewing the case's lessons as science informing practice, they must be seen as a dynamic partnership between science and practice to generate better ways to think about the problem of urban violence. As the study shows, the solutions to the problem of urban violence do not begin with specific strategies or institutional capacities, but with mindsets and paradigms. The most important thing practitioners must do is to think differently.

The Policy Challenges Of Urban Violence in Latin America

Latin America is one of the most violent regions in the world. Scholars have noted how violence in Latin American cities is an increasing problem that can sometimes put in question a country's own viability (Koonings and Kruijt, 2004; 2007). Particularly since the 1980s, the widespread democratization and economic liberalization that swept the region were undermined by weak or corrupt governments and by large economic crises that plunged the region into a

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decade of zero economic growth. In addition, globalization and the region's central role as the main producer of cocaine and marihuana created a large and dynamic black market for the production and traffic of drugs to the United States and Europe. Finally, guerrilla movements and civil wars completed the mixture of poverty and social exclusion, weak governance, and the black market for drugs that makes the region one of the most violent on the world.

Consequently, the policy challenge of governments to tackle urban violence is very complex. Since the problem is coupled with poverty, weak governance, guerrilla movements and drug trafficking, and since these areas have distinct policy objectives, there is little consensus as to the best way to deal with urban violence.

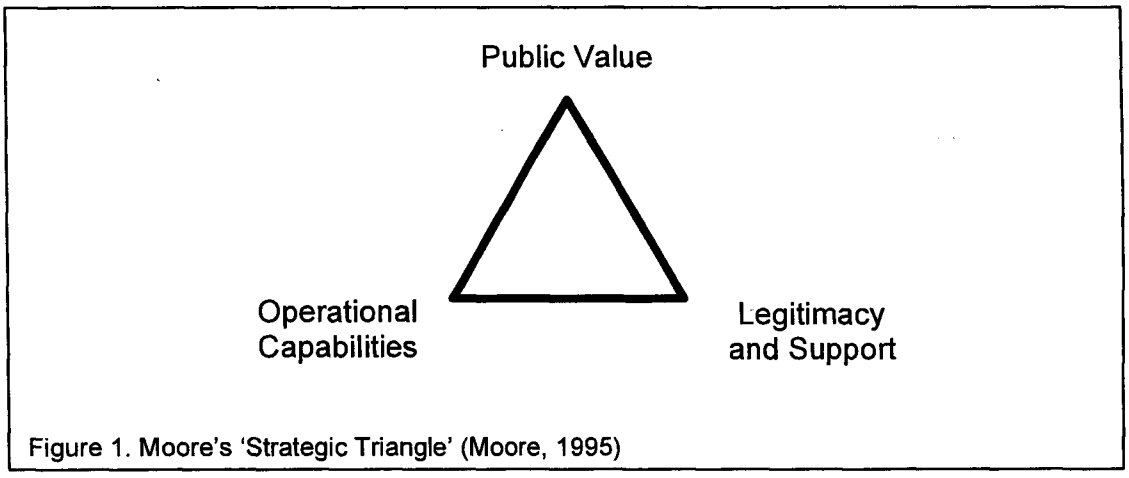

Figure 1. Moore's 'Strategic Triangle' (Moore, 1995)

Moore's 'Strategic Triangle' (1995; see Figure 1) is useful to help clear the theoretical confusion muddling the policy challenge of urban violence. The 'strategic triangle' focuses on three complex issues that policy makers should pay at-

tention to: public value, sources of legitimacy and support, and operational capabilities.

In the case of urban violence, the public value that should be sought must be a reduction in the level of violence or in the harm that it creates, which in Latin America is also understood as 'public security.' In terms of legitimacy and support, violence is generally one of the biggest concerns for citizens of the region, thus there is strong support for policies that address it. However, trust in the police and justice system is very low throughout the region, thus policies must carefully balance strong support for effective measures with ineffective institutions that have low legitimacy. Finally, operational capabilities do not only mean what physical or human resources policy makers have to achieve their goals, but rather the entire organizational frameworks of institutions. They relate to organizational cultures, procedures, 'theories of operations', and everything the institution can do or has at its disposal to achieve the public value sought.

As the literature review shows, public polices for violence reduction are generally more concerned with methods and intentions rather than with consequences. Thus, there is little understanding about which polices work and why, questions ultimately related to the institution's operational capabilities.

Therefore, the most important area policy makers in Latin America should focus on to reduce urban violence is their operational capabilities, which refers

not to physical resources but to how their operations can actually have the intended consequences on the public value they seek.

Literature Review

Public policy has long been an instrument in the fight against crime and violence. While there are many theories that attempt to explain why violence flourishes in particular societies, public policies formulated to address it generally fall within two opposite paradigms: 'prevention' and 'punishment'.

'Preventive' policies are considered soft to the extent that they tend to view criminals and offenders as marginalized objects of larger socioeconomic conditions, pushing them to become criminals (Ruiz, Illera and Manrique, 2006). Such policies attempt to create or enhance 'social benefits' that seek to address what are believed to be the 'root causes' of crime and violence in order to prevent it.

On the other hand, policies in the 'punishment' paradigm are considered to be 'tough' or 'hard' on criminals, since they stem from the understanding that crime and violence are morally deviant behaviors deserving of punishment. Such punishment, the argument goes, acts as a deterrent for other individuals from becoming criminals, consequently controlling crime (Ruiz, Illera and Manrique, 2006).

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This is a false dichotomy, however. As Walker (2011) points out, the particular shapes or instruments a policy uses are simply different means to the same end: preventing crime. Thus, it is not relevant whether a policy is deemed 'soft' or 'tough'; "the real issue is not of intentions or methods but consequences. Which policies reduce crime?" (Walker, 2011; 23)

And yet, Walker's question is difficult to answer. The 'soft' approach has a bleak track record. Although urban renewal strategies, improvements in education, the fight against poverty, drug use prevention, etc. are important goals in their own, few have consistently been able to achieve violence reduction in cities. 'Tough' policies are not promising either. Initiatives such as mass incarceration, reducing the penal age for young offenders, the death penalty, longer sentences, militarized law enforcement, and other measures have not only been unsuccessful in reducing or controlling violence; they have sometimes increased it. (For detailed analysis, see Walker, 2011; Wilson and Petersilia, 2011; Ruiz, Illera and Manrique, 2006; and Di Tella, Edwards and Shargrodsky, 2010)

While there are several policies and policing innovations that have been successful at reducing violence and crime, a detailed scrutiny of all of these policies is beyond the scope of this thesis. Instead, this study will focus on one strategy that has shown promise in reducing urban crime: problem-oriented policing.

This innovative policing strategy was chosen as a subject in part because it has demonstrated success in controlling and reducing crime (Wilson and Petersilia, 2011; Weidsburd and Braga 2006; Braga and Weidsburd, 2007, 2010; Goldstein, 2003; Weisburd and Eck, 2004; Sparrow, 2011). And also because it is an operational approach, which means it focuses on processes and better ways to conduct policing work rather than on a specific set of policy 'tools'; it is a mode of thought committed to understanding the nature of the problem in order to devise plausible responses to solve it.

While problem-oriented policing is preventive in nature, since it seeks to prevent crime from happening, it is distinct from the traditional preventive paradigm because instead of focusing on the 'root causes' of the problem it focuses on its 'underlying conditions.' The main difference between these concepts is that the 'root causes' of crime are variables statistically correlated with the crime variable, and thus are believed to have some form of association with the problem of violence. While the 'underlying conditions' of a problem are conditions with a clear causal connection to the problem, meaning that without them the problem could not happen. 'Root causes' can only be found in large statistically significant observations and can sometimes be generalized, whereas 'underlying conditions' are very specific of the context and are not subject to generalization. However, a clear understanding of the mechanics that drive the crime problem in a specific location, which provides plausible paths to intervene, compensates what 'underlying conditions' lack in broadness.

Problem-Oriented Policing

Herman Goldstein (1979) introduced problem-oriented policing –or POP– as a criticism of the way traditional policing tried to control crime. Instead of routinely trying to 'apply the law' as an end of policing, Goldstein asserted that the police would better serve their purpose if they systematically addressed a "diverse array of troublesome circumstances brought to it by the public" (Eck, 2006; 118).

These 'troublesome circumstances' are what communities consider as problems affecting them: homicide, drug dealing and consumption, prostitution, violence, theft, burglary, etc. However, POP assumes that when these problems happen regularly, it is the result of specific underlying conditions. Thus, Goldstein suggested that the police could control violence more effectively and efficiently by focusing their attention on the underlying conditions of the problem, analyzing them, and designing a response appropriate to its nature (Braga and Weisburd, 2007). In Goldstein's words:

> As originally conceived, problem-oriented policing is an approach to policing in which each discrete piece of police business that the public expects the police to handle (re-

> ferred to as a "problem") is subject to careful, in-depth study in hopes that what is learned about each problem will lead to discovering a new and more effective strategy for dealing with it. (Goldstein, 2003; 14)

With this new understanding of police business, POP "fundamentally redefines policing...[shifting] to a scientific approach to preventing crime and away from the routine application of the law" (Eck, 2006; 117). It understands that law enforcement is only a tool of police business, and what matters are outcomes as defined by the reduction or prevention of crime, violence, or whatever a community believes to be its most vexing problems.

To do this, police departments using a POP approach would have to go "through a process of problem identification, analysis, response, and adjustment of the response" (Kennedy et al., 2001; 1). Eck and Spelman (1987) crystalized this process in the SARA model (Scanning, Analysis, Response, Assessment), which has since become a well-known standard to guide police in their problem-solving endeavors (Weisburd and Braga, 2006; Walker, 2011; Boba, 2009). However, while there is no one ideal 'recipe' on how to conduct POP, this basic iterative process of identification, analysis, response and adjustment is agreed upon as being the heart of the problem-oriented approach.

POP has been highly successful in theory and practice and is understood to be one of the major innovations in policing (Goldstein, 2003; Weisburd and Braga, 2006; Weisburd and Eck, 2004). However, while there is strong evidence that POP can be successful in controlling crime and violence (Kennedy, et al., 2001; Eck and Spelman, 1987), Weisburd and Braga (2006; 133) point out that "the principles envisioned by Herman Goldstein are not being practiced in the field," and "that there is a disconnect between the rhetoric and practice of problem-oriented policing" (134).

This disconnection has been found to occur at all stages of the SARA model. In the scanning phase, one of the main differences between theory and practice is that the 'size' of the problems are beat-level, not precinct- or city-wide as was originally intended. About the analysis stage, scholars argue that it is not generally conducted in a thorough and systematic fashion, and that police officers simply confirm their preexisting beliefs about the problem. In the response stage, POP calls for an exhaustive and creative search for the best possible response to deal with the problem at hand; however, in most cases, responses hardly deviate from the traditional 'tool kit' of law enforcement and the criminal justice system. Finally, the assessment stage is generally ignored or simply performed without care for methodology or rigor. (For a more detailed analysis of the shortcomings of POP in practice, see Weisburd and Braga, 2006; 133-152; or Goldstein, 2003)

And yet, even if POP has not been implemented as Goldstein envisioned it, Eck (2006; 126) argues that even when it is implemented shallowly, POP delivers positive results, which "suggests that problem-oriented policing can be implemented incrementally," since what matters most is the problem-orientation itself rather that the particular aspects of the model. When compared with other innovative 'models' of policing:

> problem-oriented policing itself is a source of innovation... other innovations, such as hotspots policing, third party policing, focused deterrence, and Compstat highlight aspects of a problem-oriented approach. These are not alternatives, but elaborations on problem identification, interventions, and management systems that have been or could be adapted to a problem-oriented approach. (Eck, 2006; 126-127)

Aside from particular circumstances, the main reason why POP has not been implemented more fully is that it represents a fundamental change in the way police are supposed to conduct their business to and think about themselves. In this sense, POP can be understood as what Moore, Sparrow, and Spelman call a 'strategic innovation' (in: Braga and Weisburd, 2007) or an 'organizational strategy' (Moore, 1992). These "seek to redefine the mission, the principal operating methods, and the key administrative arrangements of police de-

partments" (Moore, 1992; 104), and "represent a fundamental change in the overall philosophy and orientation of the organization," which includes "shifting from 'law enforcement' to 'problem solving' as a means of resolving incidents" (Braga and Weisburd, 2007; 9).

Managing change in an organizational culture is difficult for most organizations. Considering the general resistance to change and innovation characteristic of most police departments (Braga and Weisburd, 2007), it is not surprising POP has not been embraced more fully.

However, POP holds great promise as a policing innovation for creating creative and effective responses against crime and violence. One of the best examples of the potential benefits of problem-oriented policing is Boston's reduction of youth gun violence during the 1990s, when the city adopted what has since been known as a 'pulling levers strategy'.

The Boston Gun Project's Operation Ceasefire

Like many other cities in the United States, Boston experienced alarmingly high levels of youth homicide during the 1990s. To address this epidemic in urban violence the Boston Gun Project was formed to devise a response with the help of a grant from the National Institute of Justice. The project "was a problem-oriented policing initiative expressly aimed at taking on a serious, large-scale crime problem: homicide victimization among youths in Boston" (Kennedy, Braga

and Piehl, 2001). The project involved assembling an interagency working group, applying quantitative and qualitative research techniques to asses the underlying conditions driving youth violence in Boston, developing an intervention aimed at a near-term impact, implementing the intervention, and evaluating its impact (Kennedy, Braga and Piehl, 2001).

Interestingly, the working hypothesis shared by the group at the project's onset was that youth violence was fueled by the easy availability of guns supplied to Massachusetts by routes from southern states. As the team began analyzing data from guns recovered at crime scenes, however, it was clear that this hypothesis was not the 'heart of the problem,' since most guns involved in the homicides had been actually acquired recently in Massachusetts (Sparrow, 2008). As the first hypothesis was rejected, the group soon began to analyze the problem from different angles and develop alternate explanations. This analytical process led to the conclusion that the problem was one of gang rivalry. This understanding came from the use of crime analysis with crime mapping cross-referenced with the territorial presence of gangs and an understanding of the different conflicts (or 'gang beefs') between the gangs using network analysis (Kennedy, Braga and Piehl, 2001; Sparrow, 2008; 2000).

Subsequently, the working group was able to identify the specific 'dynamics of the problem', which included the fact that most of the gang members carried weapons due to the rivalries, most were chronic offenders, and that peer

pressure acted as a powerful motivation for gang members to commit acts of violence, either to avenge fellow members murdered or to gain respect among their peers (Kennedy, Braga and Piehl, 2001; Sparrow, 2008; 2000).This knowledge yielded an intervention strategy that sought "to reverse the effects of peer-pressure within the gangs by making any gang member who committed an act of violence the mechanism of downfall for the whole gang" (Sparrow, 2008).

The strategy, known as Operation Ceasefire, involved the collaboration of all the different law enforcement agencies involved in the project with a discretionary use of the criminal justice system. As was explained to the gangs and the community in different meetings and by means of a thorough communication strategy, violence, particularly homicides, would no longer be tolerated. Individuals who committed an act of violence would bring upon their entire gang swift and weighty sanctions through a coordinated interagency action to 'pull every lever' of the justice system that would bring to prison not just the particular offender but every member of his gang (Sparrow, 2000). In other words:

> the threat was to sanction the whole gang by any and all means available, through the coordinated actions of the wide range of federal, state and local law enforcement agencies that were party to the plan. Warrants would be served, existing probation restrictions rigorously enforced, arrests made for minor offenses, resulting cases pushed

> through higher level courts, and more penalties sought. The threat was that law enforcement, by pooling its resources and focusing on one gang could invariably impose serious sanctions on that gang (Sparrow, 2000; 174)

The impact of the strategy came shortly afterwards. While the working group did have to perform crackdowns on two gangs that did not heed the warning, the intervention soon proved to be a powerful deterrent of violent behavior for other gangs. "Gang violence dropped off dramatically. The homicide rate for victims under age 25 dropped by 68% in the first year after Operation Ceasefire began, and continued to decline thereafter" (Sparrow, 2008; 64).

Although it is impossible to determine with absolute certainty how much impact Operation Ceasefire had on the reduction of Boston's youth violence as compared with other independent variables, there is a consensus among researchers that the intervention was a success. Researchers have concluded that the 'pulling levers strategy' and the problem-orientation approach which led to the intervention in Boston did play a part in the city's drop in homicide rates (Kennedy, Braga and Piehl, 2001; Sparrow, 2008). The case illustrates that, more than the specific policy intervention and its success, it is the policy formulation process of such intervention that is most relevant. In the words of those involved in the project:

> Operation Ceasefire may or may not be principally responsible for the reduction in youth homicide in Boston, but most people would agree that it represents an innovative intervention strategy that was an advance over current practice and worth trying. Crime policy would benefit from having more such innovative strategies, and the problem-solving process is one way to produce them (Kennedy, Braga and Piehl, 2001; 45).

Since Operation Ceasefire's implementation, the pulling levers strategy has been successfully replicated in different cities in the United States with encouraging results. While each police department has had to embrace the problem-orientation to adequately tailor the strategy to its specific context, Los Angeles, Stockton (CA), Indianapolis, Chicago and Lowell (MA) have implemented a 'pulling levers' approach with positive short-term results in reducing gang violence (Braga, 2010).

However, even if some in the American police industry understand the pulling levers strategy and problem-orientation, researchers and the media do not always comprehend the nature of the strategy. For example, instead of appreciating the problem-orientation and the analytical process that led to the crafting of the intervention, some focus solely on the deterrent effect that stems from the strategy of targeting violent offenders. Thus, Guerrero (2011; 2010) concludes

that public security policies must simply adopt that focus to counter other kinds of violent behavior and crime; for example, national-scale drug violence. This is an oversimplification of the pulling levers strategy and a grave underappreciation of the problem-oriented approach for three reasons.

First, it assumes that other kinds of crime and violence respond in the same way to the strategy, regardless of the underlying conditions behind each kind. Second, it rests heavily on the notion that changes in the perceived costs and benefits of the criminal action provide a deterrent without analyzing that different problems have different and specific dynamics and that a rational calculation of costs might not be the best explanation for the problem. And third, it focuses solely on the tool of the intervention, rather than recognizing the process through which it was selected and crafted.

Once these three issues are considered, it is evident that the best explanation of the underlying logic behind the pulling levers strategy in Boston's case is not the deterrent effect of a change in the costs of offending, but the recognition of the effect of peer-pressure as the main motivator behind youth homicide in that city. Therefore, the intervention was crafted specifically to 'sabotage' that dynamic of peer-pressure and invert its influence to serve as a deterrent, rather than cause, of violence (Sparrow, 2008).

The distinction is noteworthy because it illustrates an inadequacy that tends to plague problem-oriented policing. As Braga explains:

> the important lessons to be drawn from successful crime prevention case studies inhere in the *guiding principles and underlying logic used in developing* effective responses, rather than the specific interventions designed to tackle specific problems in specific settings (Braga, 2010; 146; emphasis added)

Therefore, it is necessary to explore the methodologies and techniques behind the problem-oriented approach and its study with the intention of establishing a ground for a comparative analysis.

Before that stage is reached, the following section will first delve into the notion of problem-orientation in a broader spectrum of public policies and harm reduction strategies. The complexity of the issue requires us to expand the concept of problem-orientation beyond the scope of problem-oriented policing in particular and of the law enforcement paradigm in general.

Problem-Orientation in Public Policy

Problem-orientation and problem solving is not an approach exclusive to policing; in fact, some would argue that the centrality of the problem is the cor-

nerstone of all public policy. Harold Lasswell's original conceptualization of the term still rings true today: "The policy sciences are particularly concerned with the problem solving performances of governmental and private organizations" (Lasswell, 1971; 57). The pragmatic and instrumental understanding of public policy constitutes only a small fraction of the broad field of public policy; however, it is certainly a valid one (for a comprehensive review on the field of public policy see: Theodoulou and Cahn, 1995; or Parsons, 2007).

It is widely recognized that problem-orientation is central to public policy analysis, as evidenced by the first question of a policy analysis exercise: "What is the problem?" (Bardach, 2004) And yet, due to the complexity of public problems and the subjective nature of policy analysis and the policy cycle, the centrality of the problem is often relegated to the backdrop.

POP and other policing innovations that use the problem-oriented approach are an example of a wider trend that brings the problem back to the forefront of public policy analysis. This trend, also labeled under the terms 'harm-reduction', 'risk control', or 'risk management', is present in a wide array of policies: regulatory control, poverty reduction, healthcare, etc. What they have in common is the shared orientation towards the *social ills* (or harms, problems, risks, etc.) they attempt to reduce (Sparrow, 2008).

That orientation is further marked by a pragmatic approach towards those problems. It is less concerned with 'root causes' and more with specific dynamics, knots, concentrations of harms, or underlying conditions, precisely because their analysis yields more operational knowledge and 'opportunities for sabotage' (Sparrow, 2008, Moore, 1992).

This is the result of a closer partnership and collaboration between policy scholars, policy analysts, and frontline practitioners. For many years, the two worlds of scholarly research and operational performance in the public sector have been disconnected. "Experts recognize that the analytical and scholarly traditions within their fields have not been sufficiently connected to operational possibilities" (Sparrow, 2008; 257), which is why the presence of this trend oriented to reducing social ills is encouraging. As Braga (2010) paraphrases Kennedy and Moore: "the integrated research/practitioner partnerships in the [Boston Gun Project] working group closely resembled policy analysis exercises that blend research, policy design, action and evaluation" (198).

It is evident that pooling the unique knowledge of frontline practitioners and the refined analytical tools of policy researchers can bring about successful interventions to reduce social ills. In such a case, the policy analyst might be closer to becoming what, according to Farr and his colleagues, Harold Lasswell originally envisioned:

> the policy scientist was (to be) a practitioner of a kind of science that took the lawyer's or doctor's practice as its model, putting the methods and findings of a general science to work in solving real-world problems... Most of all, the policy scientist was 'relevant' to governance in an age of crisis. Contributing directly to decision making on fundamental questions, the policy scientist was an expert, skilled in intelligence...braced for struggle (Farr, Hacker and Kazee, 2006; 582).

Using a problem-orientation to craft public policy systematically is a challenge for public organizations and agencies. The difficulties are similar to the ones the implementation of a policing innovation such as POP brings to a police department. The approach means a public organization must reevaluate its mission and 'theory of operations'. This organizational challenge derives from the fact that arranging day-to-day activities around problems is fundamentally different from arranging around known functions or processes (Sparrow, 2008).

Problems – harms, risks, or ills – are real phenomena that exist outside of an organization. They have their own specific set of dynamics and logic driving them. "On the surface, the problems may look similar. However, the circumstances may be different, and the causal mechanisms might be different" (Braga, 2010; 145). Organizations tasked with solving them, on the other hand, usually

arrange their activities either around specific functions (or tools) or processes and assumes these will be successful in solving problems. These functions and processes, however, are an invention of the organization: they exist within, and relate to its own 'theory of operations' (Sparrow, 2008). What this means is that organizations are generally organized and concerned around their *inputs* and *outputs*, instead of their final *outcomes*.

This occurs because it is not entirely possible to establish a specific methodology to organize around problems; it requires creativity and tolerance of uncertainty, traits not common in large organizations in general. If the *problem* is the 'guide', it means the organization must learn to identify problems in different ways, pick them, dissect them, adapt to them, and possibly cooperate with others to control them. It must be flexible in its actions and procedures to be responsive to the different nature of the problems it is tasked with (Sparrow, 2008). In this sense, the problem-orientation cannot be defined as a specific set of tools or methodology; it must be understood as an approach, a 'mode of thought', an 'operational method'.

As mentioned, the fluid and shapeless characteristic of the problem-orientation means that a systematic use of the concept by organizations is difficult to establish. However, even without the systematization, the approach can be particularly useful to resolve problems that have gained critical dimensions. As such, the problem-orientation can still be used when problems are larger than the

existing structures or capabilities of the organizations tasked with controlling them. This point is emphasized because the problem of urban violence in Rio de Janeiro is too large and complex for the police departments to handle on their own. Therefore, to explore the concept of problem-orientation only as an innovation in policing would have narrowed the evident usefulness of the approach for the case studies.

Methodological Implications for Problem-Orientation in Public Policy

While it is true that no one specific methodology or technique fully captures the problem-oriented approach, the task does have a basic common ground. In its most basic interpretation, the approach means to "Pick Important Problems & Fix Them" (Sparrow, 2008; 68). The basic three-step process of problem solving consists of diagnosis, treatment and monitoring. To aid organizations, Sparrow (2008) elaborates further and proposes a six-stage protocol:

1. Nominate and select potential problems.
2. Define the problem precisely.
3. Determine how to measure impact.
4. Develop an intervention.
5. Implement the plan.
    a. Monitor periodically and adjust the plan as necessary.
6. Close the project (do long-term monitoring).

Specifically for problem-orientation initiatives for crime prevention and violence control, these steps can be summarized in the SARA model (Eck and Spelman 1987). Besides being a useful model in POP, the SARA model is also used by crime analysts for 'strategic crime analysis' (Boba, 2009). However, Braga (2010) reminds us that the SARA model is simply one way of operationalizing POP and is not necessarily the only (or best) way to do so. "Problem-oriented policing is an analytical approach, not a specific set of technologies" (Kennedy and Moore, summarized by Braga, 2010; 16).

In an effort to widen the scope of problem-solving methodologies, it is also useful to look at the processes behind strategic intelligence systems. Strategic intelligence offers many tools to improve policing and has played an important part in innovations developed in the field. For instance, its influence has been found not only in improving the traditional policing model, but it has also promoted a larger shift of the entire paradigm itself, as evidenced by the emergence of 'intelligence-led policing'. This paradigm is defined as:

> the application of criminal intelligence analysis as an objective decision-making tool in order to facilitate crime reduction and prevention through effective policing strategies and external partnership projects drawn from an evidential base (Ratcliffe, 2003; 3)

This policing innovation can be closely associated with POP since they both ultimately aim to prevent and control violence using an analytical approach, although POP centers its attention around the problems per se, while intelligence-led policing is more concerned with systematizing the process behind the crime prevention mechanism (Ratcliffe, 2003; 2009). Therefore, they should not be considered as competing paradigms but rather as complementary approaches.

What must be understood from the proposed problem-solving methods is that they all are variations of the same basic principle of diagnosis, treatment and monitoring. The specific model or stages that are ultimately chosen will depend on their usefulness for the task at hand. The absolutely crucial aspect, however, is to never underestimate the relevance of the process for developing interventions and focusing exclusively on the particular aspects of the intervention instead, with the additional caveat of understanding that the process is not fixed and will always require a great deal of flexibility and creativity. As Braga summarizes his colleagues' opinions on POP:

> the work of problem-oriented policing will never be entirely routinized. It is quite possible that even after we have had long experience with the techniques of problem-oriented policing, developed a high degree of self-consciousness about the methods, and even learned about how particular prob-

> lems are best solved generally, effective crime prevention may still require a great deal of *imagination* and *creativity* to deal with the peculiarities of a new situation ([Kennedy and Moore, 1995] in Braga, 2010; 2; emphasis added).

Therefore, before moving on to the research methodology employed for the construction of the case study developed in this thesis, we will propose a framework to analyze processes for developing problem-oriented interventions for violence reduction that is suitable for the case of Rio de Janeiro.

Proposed Framework for Analysis of Processes for Developing Problem-Oriented Interventions

Taking into consideration the different methods, protocols and cycles reviewed in the previous section, we now propose a specific model to guide our analysis of policy formulation processes with a problem orientation. This model is a synthesis of the different models proposed in the existing literature of POP and problem-oriented public policies, with adaptations pertinent to the nature of the case studies developed in this thesis.

The model consists of four stages: (1) definition, (2) analysis, (3) response, and (4) assessment. While it does involve an order, the model is iterative and dynamic in nature, meaning that there should be constant feedback between

the stages, as results in one stage might force a reevaluation of results in another. Figure 2 illustrates the model graphically.

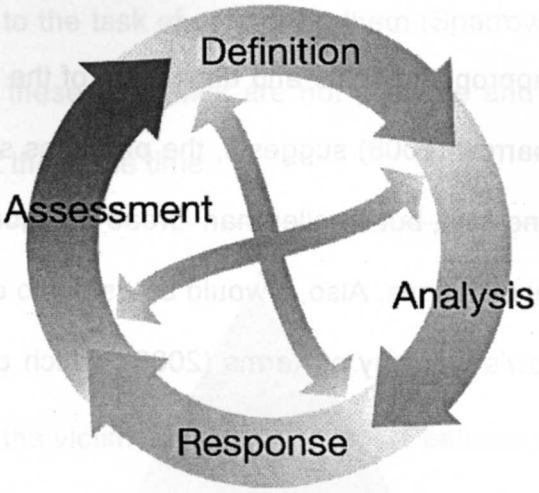

Figure 2. DARA model for analyzing problem-oriented public policy

Definition. The suggested model begins with problem definition. It replaces the 'scanning', 'problem identification', or 'problem nomination' stages found in other models because the case study developed in this thesis is not as concerned with a systematic approach to problem-oriented public policies as with the need to control a clearly identified phenomenon of urban violence.

Even if the problem has been identified, however, it still needs to go through a process of definition. This is necessary because the problem of 'urban violence' is an aggregate of a wide array of issues: homicide, extortion, kidnap, shoot-outs, disorder, theft, etc. Thus, in this stage, the definition of the problem must be narrowed to clearly specify what kind of urban violence will be dealt with

and to determine its nature. To do so, several factors can be taken into consideration, including how relevant is the problem to the community, how harmful is it, and how broad or concentrated is its distribution, among other factors.

Selecting the appropriate scale and dimension of the problem definition is also important. As Sparrow (2008) suggests, the problems should be larger than one specific case or incident, but smaller than 'broad categories of harm' that are addressed at the level of nations. Also, it would be useful to determine the type of problem using Sparrow's typology of harms (2008), which categorizes the problems as follows:

- Invisible harms (not detected by the organization, e.g., consensual crimes)
- Conscious opponents (a harm that adjusts to changing conditions, e.g., organized crime)
- Catastrophic harms (situations with low probability of occurrence, but with devastating consequences, e.g., terrorist attacks)
- Harms in equilibrium (conditions that are self-perpetuating and tend to restore themselves even after small interventions are made, e.g., extortion rackets)
- Performance-enhancing risks (harms that are motivated by risk-taking that help people and organizations achieve their goals, e.g., bribing officials)

As opposed to other typologies that group harms or problems according to their jurisdiction, professional field, or exposure, these categories are useful because they group harms according to the distinct 'operational challenges' that each category brings to the task of controlling them (Sparrow, 2008). However, it should be noted that these groupings are not absolute and harms may fall into different categories at the same time.

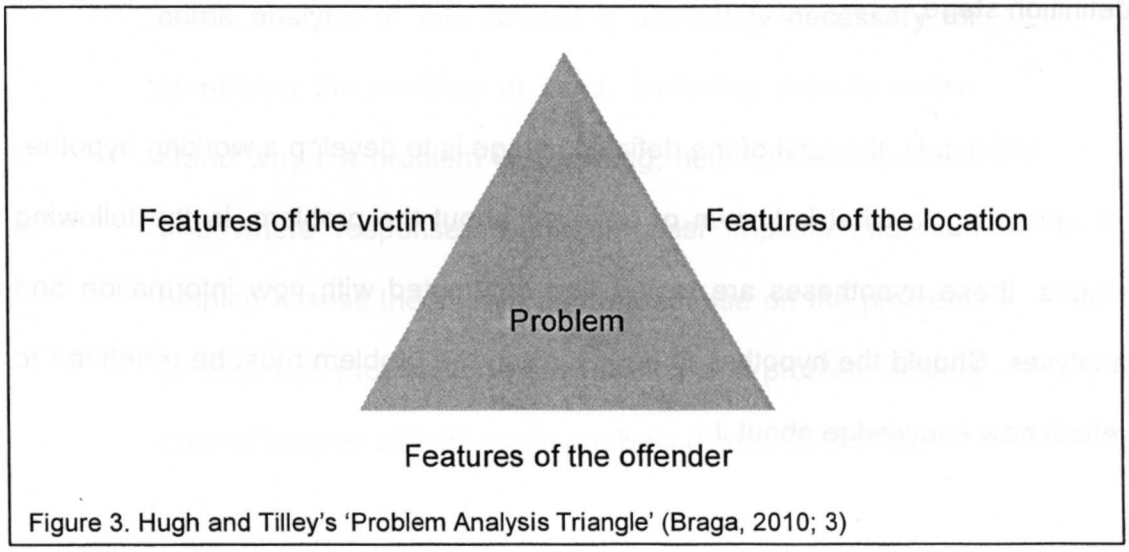

Figure 3. Hugh and Tilley's 'Problem Analysis Triangle' (Braga, 2010; 3)

Specifically regarding crime issues, problems can further be defined using Hugh and Tilley's 'Problem Analysis Triangle' (Braga, 2010; see Figure 3). This model breaks down the criminal problem according to the features and characteristics of the victim, the offender, and the location. The tool gives simple yet powerful parameters to help define the nature of the problem by answering: (a) who is being victimized, (b) who is committing the crime, (b) where is the problem happening.

The problem's definition is a crucial step because it sets the ground and illustrates the direction that the analysis stage will pursue. For example, when the Boston Gun Project began, the problem was defined as the easy availability of weapons transported from southern states; thus, the group focused its analytical efforts to prove this point. As that case illustrates, the results from the analysis proved the original problem definition was wrong and forced the team back to the definition stage.

Ultimately, the goal of the definition stage is to develop a working hypothesis according to what is known or believed about the problem. In the following stages, these hypotheses are tested and contrasted with new information and analyses. Should the hypotheses be incorrect, the problem must be redefined to reflect new knowledge about it.

Analysis. The analytical stage is the cornerstone of the problem-solving approach. In it, the underlying conditions and specific dynamics that fuel the problem are studied until the 'heart of the problem' is clearly identified. There is no easy way to define it, but it can be understood as the clear causal mechanism driving the problem, without which the problem would cease to occur. In that sense, it is the mechanism most susceptible to 'sabotage' through an intervention.

The problem-oriented approach is not limited by any particular kind of analytical tools. The particular choice will ultimately depend with the hypothesis formulated in the definition stage. However, in the particular field of problem-orientation for crime and violence control, two fields are especially useful: crime analysis and strategic intelligence. As Boba (2009) explains:

> crime analysis in this context is absolutely necessary for identifying the problem at hand, analyzing data to understand why the problem is occurring, helping develop when and where responses would be best implemented, and helping assess the impact of the response on the problem. In essence, problem-oriented policing and problem solving *cannot* happen without crime analysis (Boba, 2009; 45).

The tools of crime analysis help scrutinize the causal mechanisms behind the problem along the lines of situational crime prevention, which focuses on the problem analysis triangle presented above, or according to environmental crime analysis, which "explores the distribution of targets, offenders and opportunities across time and space" (Braga, 2010; 21). Thus, the analysis explores the dynamics that determine who are victims, that push offenders to commit crimes, and that provide opportunities in terms of location and time. An existing systematic and robust infrastructure for crime analysis would certainly be helpful; however,

should it be absent, crime analysis must be performed with close consideration of the hypotheses proposed in the first stage of the model.

As mentioned earlier, strategic intelligence is a powerful tool to aid in the control of urban violence. As such, many of its techniques may be used to better understand the problem at hand, particularly, analysis of networks of offenders and criminal activity (Boba, 2009; Ratcliffe, 2003).

In addition, broader fields of social science and research are also helpful. These fields include urban sociology and anthropology, economics, crime economics, criminal justice, law research, political science, and others. Research conducted in this area is useful to provide background and an understanding of broader forces behind the problem. However, these areas of research generally focus on 'root causes' and broad socioeconomic correlations, which are not as relevant to the problem-oriented approach due to their lack of operational opportunities.

Finally, while the analysis is nurtured by both quantitative and qualitative techniques, and is aided by recent technological developments, no technique or technological advance should ever be used just for the sake of its novelty or promise. The choice of method must always be subordinate to the nature of the problem and must keep in mind the operational goal of the exercise.

Response. The response stage consists of developing and implementing a plausible intervention strategy that controls the problem under study. The nature of the intervention must be guided and informed by the knowledge gained in the analysis stage.

Complementing the lines of analysis developed by the 'problem analysis triangle' previously presented, Clarke and Eck's revision of the model helps police think about targets for intervention given the problem's feature in terms of victim, offender and place (Braga, 2010; see Figure 4).

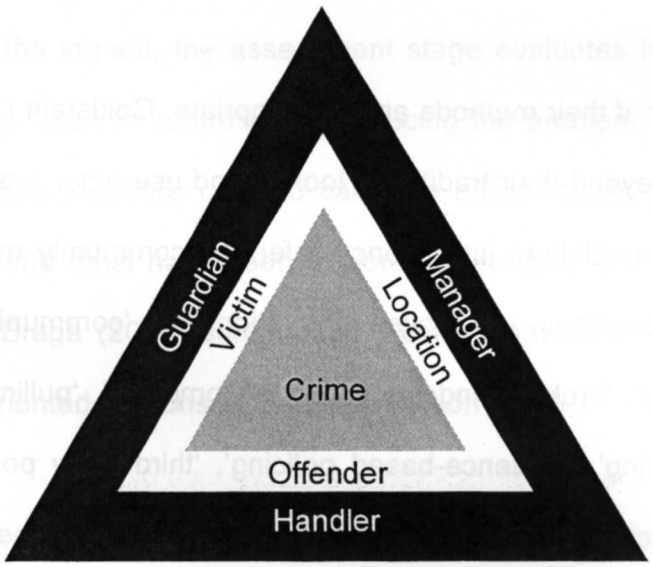

Figure 4. Clarke and Eck's 'Revised Crime Triangle' (Braga, 2010; 28)

The 'revised crime triangle' proposes that each of the elements of the crime problem has a 'controller'. Victims (or targets) have a 'guardian' that protects them; offenders have 'handlers' that exert some amount of control over

them; and locations have 'managers' that have some responsibility over what happens in that place (Clarke and Eck, 2003] in Braga, 2010). Thus, the controllers may be plausible targets of intervention.

The particular form or type of response is unlimited. Problems challenge the organizational arrangements and functions of traditional controlling agencies; therefore, problem-oriented approaches mandate flexibility and creativity in the responses crafted. Given that this thesis deals with problems of urban violence, most interventions will come from the tool kit of law enforcement. Provided that they are effective, tools form the enforcement paradigm may be appropriate.

However, if their methods are inappropriate, Goldstein (1990) encouraged police to look beyond their traditional tool kit and use other tools such as conflict resolution and mediation, interagency referrals, community mobilizing, physical environment alterations, etc. Police innovations like 'community policing', 'zero-tolerance policy', 'broken-windows theory', 'CompStat', 'pulling levers policing', 'hot spots policing', 'evidence-based policing', 'third party policing', and others have been effective to various degrees but they should not be embraced blindly due simply to their popularity, political support or novelty (for more on police innovations, see Weisburd and Braga, 2006).

Finally, the response stage involves the implementation of the selected intervention. Of course, implementation details will be subject to the nature of the

problem and the knowledge gained from the analysis. Whether it is tested first with pilot studies, or implemented on a full scale, is ultimately related to the kind of problem dealt with. However, the implementation should maintain a flexible outlook and use preliminary evaluations and monitoring to adjust it as required.

Assessment. The assessment stage is crucial for three reasons: (1) it evaluates the impact of the intervention itself, (2) it can help one learn about the process for developing the intervention, and (3) it is elemental for issues of police accountability.

In terms of the impact, the assessment stage evaluates how successful the intervention has been in controlling or reducing the problem. The variables, indexes, or any other measure used to calculate effectiveness depend on the problem definition and must have been explored thoroughly in the analysis and response stages. Braga (2010) summarizes Scott's framework for the assessment of problem-oriented responses. The intervention may:

1. totally eliminate a problem;
2. substantially reduce a problem;
3. reduce the harm created by a problem;
4. deal with a problem better; or
5. remove the problem from police consideration ([Scott, 2000] in Braga, 2010; 172).

The impact evaluation helps monitor progress and provides important information to adjust the project to changing conditions or unintended consequences. Ultimately, it determines whether the process should begin anew or attention should be turned to a different problem.

In terms of the process, the assessment stage is useful to help organizations learn how to implement and systematize the problem-oriented approach. As mentioned earlier, the real opportunity for replication and learning lies not in the final 'products' or interventions, but in the process used to develop such solutions. "If law enforcement agencies do not have a mechanism to learn from others' mistakes and assist others to learn from their experiences, they will always be reinventing the wheel" ([Clarke, 1998] in Braga, 2010; 30; for more case studies regarding POP see Clarke, 2002; Kennedy, Braga and Piehl, 2001; Sampson and Scott, 1999; Read and Tilley, 2000).

Besides the learning experience it presents to other agencies, an assessment of the process is also very important to systematize the problem-oriented approach within the organization that conducted the process. Well-documented assessments can be a supporting force for broader organizational change since they provide knowledge that can help the organization learn and improve from its own performance (Braga, 2010).

And finally, in a democratic context, assessment helps ensure accountability of police performance, which for many citizens in the case study is the only form of direct contact they have with the state. Thus, it is a crucial step for legitimizing the state and its actions.

Research Methodology

As demonstrated in the literature review, case studies are one of the preferred methods of research for this subject. Due to the singularity and strong influence of specific conditions that affect which solution is devised for a problem of crime and violence in a given case, a study that only covers the intervention and its effects would be of little practical value to the field. Therefore, case studies that describe the process for developing such interventions are an optimal tool for research.

The case study done for this thesis has limitations. For instance, it is not a goal of this research to provide conclusive results about violence reduction strategies. Nor is it an attempt to study the impact of particular strategies on crime trends compared with other independent variables. Rather, the case study attempts to describe the processes for developing interventions for the problems of urban violence in the city studied in order to provide a valuable learning experience to practitioners in cities with similar problems.

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The case was developed with information from three different sources: (1) in-depth interviews with relevant actors involved in the policy formulation processes, (2) ethnographic observation, and (3) documentary research covering academic literature, descriptive statistics, and work documents from the policy formulation processes. While the case study is qualitative in nature, quantitative data was used to support and illustrate certain aspects of the cases, such as general crime trends, a description of the backgrounds in the cities, and evaluations of the interventions. The interviews reveal the thought process behind policy formulation; they attempt to illustrate what and how policy makers thought about the problem in order to solve it. The data collected from ethnographic observation was used to understand how the policy works and to get a sense of its impact in the field. Finally, documentary research provided data to clearly understand the background of the case, and to form a broad understanding of the problem.

The interviews and ethnographic observation for the case were done during a visit to Brazil made in July 2011. With the assistance of the *Fundação Getúlio Vargas* (Getúlio Vargas Foundation - FGV) six in-depth interviews were conducted with academics, consultants, senior officials of the Viva Rio ONG, police personnel, and senior officials of the State Secretariat for Security (for detailed profiles of the interviewees see Appendix A). The ethnographic observation was done during a visit to the 'Cidade de Deus' *favela*, its Pacifying Police Unit (UPP), and a community forum held by the 'UPP Social' project. In addition, most of the

research material and documentary sources that illustrate this case were obtained from FGV's libraries at São Paulo and Rio de Janeiro.

The DARA model proposed in the previous section was used as an analytic guide, with a focus on revealing the thought process that behind the formulation of UPPs. After providing a background of urban violence in Rio de Janeiro and the nature of the Police and Public Security, the case study explores (1) how the problem was further defined so as to lead to a better understanding of its dynamics, (2) the analysis that lead to the crafting of a new intervention strategy, (3) how the crafted response took advantage of the operational knowledge gleaned from the previous stages, and (4) how the assessment stage was conducted to monitor the project's impact, aid in developing learning opportunities and influence police accountability.

The case is not an exhaustive problem-analysis exercise, which would be a task far beyond the scope and limitations of this thesis, but an analysis of the development of responses to the crises of urban violence in Rio de Janeiro using the problem-oriented framework as a guide.

Finally, the goal of the case study is to provide valuable lessons from its problem-solving process, so as to illustrate how the policy works and what should practitioners willing to use the problem-oriented approach bear in mind.

Case Study: Rio de Janeiro

The case study begins with a description of the background of Rio de Janeiro's urban violence phenomenon. Then it describes the nature of Rio's public security institutions, specifically its Military Police. Finally, it delves the Pacifying Police Units' policy with a focus on the thought process that formulated the strategy.

Rio de Janeiro – Brazil's capital city from 1763 to 1960 – is world-renowned for its beaches and attractions. Unfortunately, the city is also notorious for being one of the most violent in the world. Since the 1980s, the city experienced an explosion in criminality and urban violence that peaked in 1995 when the homicide rate was 61.5 per 100 thousand inhabitants (Brazil's average was 23.8) (Ferreira, 2011). In 2007, the homicide rate was still high at 40.1 compared with 25.2 for the national average and 15.0 for São Paulo. To put that figure in perspective, close to 80 people were killed each week in Rio's metropolitan area that year, most of which were victims of assassinations, assaults or stray bullets (Perlman, 2010).

Besides homicides, the city also saw an epidemic increase in all kinds of violence from robberies, assaults, carjacking, kidnap for ransom, commercial and residential break-ins, to paramilitary-style extra-judicial executions and gang warfare (Gay, 2009). Without overstating, it is possible to say that the situation had escalated to a level where the viability of the city was in serious doubt. "These

incidents of violence had created a sense of extreme public insecurity and the perception – right or wrong – that there has been a complete breakdown in public law and order" (Gay, 2009; 30). The situation led many residents of Rio (*cariocas*) to radically alter their behaviors or to abandon the city altogether (Gay, 2009; Ferreira, 2011).

Thorough studies, however, have revealed the unique nature of the violence epidemic in Rio. While many variables that fuel violence in Rio are common in the rest of Brazil – such as poverty and exclusion, drug trafficking, and corruption –, the problem in Rio is best understood as a consequence of urban wars fought by rival drug gangs and the state (through the police) for control of parts of the city, mostly slums – or *favelas* – where the state has long been absent.

Shantytowns and slums are a worldwide phenomenon of large cities in the developing world and especially Latin America. In Rio, *favelas* emerged over 100 years ago (Zaluar, 1998), as the city could not keep up with the influx of population from the countryside. For the better part of the 20th century, *favelas* were not the centerpiece of urban violence they are today and were simply popular communities (*asentamientos populares*) characterized by extreme poverty, a lack of access to public services, an abandonment by formal authority, and informal socio-urban 'survival strategies'. These deplorable conditions were responsible for the marginalization of the poor that has branded *favela* residents as 'second class' or 'informal' citizens of the 'fractured city' (Koonings and Kruijt, 2007).

Today, however, as the city's *favelas* have seen a gradual expansion of public services and the most extreme poverty has been abated, the source of the city's fragmentation is the high level of violence seen in some *favelas*. As Ferreira (2011) shows, some *favelas* in Rio have homicide rates of up to 50 per 100 thousand inhabitants a year, whereas rich neighborhoods such as Botafogo or Copacabana have rates of only six homicides per 100 thousand inhabitants, a rate similar to the average in the United States. This situation has led to the stigmatization of the poor (even though they are the main victims of violence) and the categorization of *favelas* as 'no-go areas' compared to the 'rest' of the city. This situation is common in other large 'mega-cities' but is all-too-evident in Rio de Janeiro, where the slums are not in the periphery but are tangled among the richest parts of the city, due to its topographical nature.

The idea that poverty breeds violence is persistent. While this idea fuels a popular misconception that categorizes all poor people as criminals, many researchers have worked to find links between poverty and exclusion to violence and found that indeed, violence follows poverty (Perlman, 2010). However as Koonings and Kruijt (2007) point out:

> Poverty in itself will not generate systemic or organized violence. But persistent social exclusion, linked to alternative extra-legal sources of income and power, combined

> with an absent or failing state in particular territorial/social settings, will provide means and motives for violent actions (Koonings and Kruijt, 2007; 13).

In Rio de Janeiro, the 'alternative extra-legal sources of income and power' are mainly the exorbitant riches generated by the illegal market for drugs, particularly cocaine. While drugs, mainly marihuana, have always been present in Rio's *favelas*, drug dealing and trafficking only became violent after the 1980s. During that decade, criminal gangs that had been formed during the 1960s and 1970s in the ideologically charged prisons of Brazil's military regime and that controlled a number of small illegal markets in Rio (*jogo do bicho*, smuggling, etc.) seized the market for cocaine transshipment from the Andes to Europe and Africa (Perlman, 2009; 2010; Leeds, 2007; Gay, 2009).

While Brazil is a relatively small player in the international traffic of illegal drugs compared with Colombia (as a producing country) and Mexico (as a transit country), most of the transshipment of cocaine that happens in Brazil happens in Rio de Janeiro. And most significantly for the power of Rio's drug gangs, 20% of all the cocaine that is smuggled into Brazil is distributed locally (Gay, 2009). So if one considers that "it is now estimated that Brazil is the second-largest consumer of cocaine in the world, behind the USA" (Gay, 2009; 33) and that "Rio has the highest cocaine consumption of any city in the world" (Perlman, 2010; 310), the revenues from local drug demand represents a huge motivation for gangs to con-

trol the market, which due to its illegal nature, turn to violence as a means of contract enforcement and control.

These drug gangs are entrenched in Rio de Janeiro's *favelas,* from where they control their drug distribution networks, mostly to supply the affluent consumers in Rio's South Zone with cocaine. The link between poverty, persistent social exclusion and drug markets is a phenomenon that has been studied deeply in Rio de Janeiro. Zaluar (2004) described the 'perverse integration' that criminal gangs and violent behavior have as alternative routes for socialization in *favelas*. Nonetheless, Zaluar also notes that only about one percent of the total *favela* population belonged to drug gangs (1 million people live in Rio's favelas according to Perlman, 2010), which demonstrates how the behavior of a small number of individuals can impose a disproportionally large cost on the rest of the population.

While only very few are in the drug business per se, many more participate in networks of informality. *Favelas* are characterized by informal arrangements for survival, thus the 'illegal' behaviors of *favelados* can be better thought of as a continuum instead of an absolute category: there are degrees of illegality. This continuum ranges from the downright violent criminal to the law-abiding citizen, with power brokers, thieves, illegal traders, informal merchants and others in between.

These networks of informality are the result of alternative patterns of social integration that emerge in response to a state of 'unrule of law' that reigns in Rio's favelas. This phenomenon is caused by the presence of what Koonings and Kruijt (2004) call 'governance voids', which represent partial state failures. In addition, the vacuum of formal authority thus created is filled by the emergence of 'parallel powers' of violence brokers and drug gangs who mount alternative systems of violence and order (Koonings and Kruijt, 2004; 2007). In these voids

> "the legal authorities and the representatives of law and order are absent, and consequently... a kind of osmotic symbiosis emerges between the state and 'common' criminality... 'Law and order' is then the result of a fluctuating order of parallel forces of local power players and 'moral' authorities in shifting alliances" (Koonings and Kruijt, 2007; 17).

State absence has long been a feature of Rio's *favelas*. Furthermore, since the demise of the military regime in the 1980s, local politicians turned *favelas* into clientelistic fiefdoms. Thus instead of bringing complete sate presence to those territories, they have continued to isolate them by negotiating with community leaders and power brokers trading some urban services and giveaways in exchange for votes, provided that the status quo of 'unrule of law' remains so as

to not challenge the activities of the drug gangs (Koonings and Kruijt, 2004; 2007; Perlman, 2009; 2010; Leeds, 2007; Gay, 2009).

Thus, we can see how the two elements proposed by Koonings and Kruijt – extra-legal sources of income and a failing state – combine with poverty to generate the means and motives for violence in Rio de Janeiro.

The policy responses of the governments of Rio de Janeiro's state and Rio de Janeiro's municipality have varied greatly. For around 30 years, policymakers had an agenda that saw violence solely as a consequence of economic stagnation, poverty and inequality (Ferreira, 2011). Thus, most of the policy approaches have centered on urban renewal, education, training, and conditional-cash transfers. This diagnosis discouraged the use of force and law enforcement to deal with the violence problem, and therefore, "the entire structure of public security policy was abandoned" (Ferreira, 2011; 73).

Only after crime and violence began to spill over from the *favelas* to the rest of the city did enforcement begin to play a role to counter the 'threat' posed by the *favelas* and their drug gangs. Since law enforcement had long been absent from the gang-controlled *favelas*, however, the ensuing confrontations between the police and the drug gangs was fueled by a logic of urban warfare, with police only entering favelas heavily armed and with the assistance of armored vehicles and helicopters.

The interventions did little to reduce the violence and actually made it much worse. The police were only used as a 'quick-fix' to placate the middle class, so police operations in *favelas* were mostly conducted to kill or apprehend suspected drug traffickers or other criminals and for the occasional seizure of arms and drugs (which were often re-sold by the police to opposing factions).

As a consequence, Rio's drug gangs experienced rapid changes that led to an escalation in their lethality. The use of more powerful weaponry by the police induced an arms-race of sorts, so when the most common guns used in the 1980s were handguns, today, drug gangs employ military-grade assault rifles (AK-47, M-16, AR-15), bazookas, grenade launchers, and even antiaircraft missile launchers (Perlman, 2010). In addition, the increased 'turnover' in the ranks of the drug gangs that resulted from the death or incarceration of the original leaders led to fragmentation of the main drug gang – the *Comando Vermelho* (CV) – into two smaller offshoots and rival factions – *Terceiro Comando Puro* (TCP) and *Amigos dos amigos* (AMA). That made the situation much worse as the three factions (CV, TCP and AMA) were now embattled amongst themselves and the police for control of Rio's *favelas* (Perlman, 2010; 2009; Beltrame, 2009).

Another consequence was that for entire generations of inhabitants of the *favelas*, an extremely violent police suddenly became the only form of state they had ever encountered. The police, a very weak and corrupted institution until very

recently, only entered the *favela* to kill, and many times killed innocent bystanders in addition to suspected traffickers. Moreover, they engaged in abuses of power that ranged from extortions to beatings, torture and extra-legal executions. Such actions created a relationship between *favelados* and the police based on hate and mistrust that further reinforced the logic of war fueling violence there (Perlman, 2010; 2009; Leeds, 2007).

I have outlined the four main, broad social dynamics that fuel urban violence in Rio: poverty and exclusion, drug markets, 'governance voids' and a violent police force. How these relate to 'underlying conditions' of the problem according to the framework will be analyzed later in the case study. However, before that stage, it is necessary to review Rio de Janeiro's police institutions to understand how they are part of the problem, and how they have become an essential part of its solution.

Rio de Janeiro's Police

In Brazil, public security is a responsibility of State governments; thus, the police are a part of the State Secretariat for Security (*Secretaría de Estado de Segurança* – Seseg). Constitutionally, the police function is split between two institutions, the Military Police (*Polícia Militar* – PM) responsible for ostensive policing and the Civil Police (*Polícia Civil* – PC) responsible for the investigative functions of law enforcement.

The categorization of PMs as 'military' can be misleading. It does not mean the PM is a branch of the armed forces, nor that is involved in any part of the military justice system, or that its functions are similar to those of the United States' National Guard (as Perlman, 2010, has suggested). Instead, the 'military' adjective of PMs means that police institutions must mimic the armed forces' organizations and hierarchies. Thus, police careers are divided into two classes, soldiers and officers. The two classes undergo different training and education and have different career prospects. The highest rank soldiers can achieve is sub-lieutenant, while officers start as lieutenants and can become colonels. To enter either class, recruits are selected by specific entrance examinations (as mandated by Brazilian law for public servants). In terms of its organization, the PMs are arranged geographically under Commands (or Regions), Battalions, Companies, Platoons, Detachments and Posts (or Bases). Finally, though PMs are also recognized as army reserves and are part of the Brazilian System of Public Security, they are paid for and maintained by each state and are subordinate to the State Governor and its Secretary of State for Security.

In any other respect, Brazil's PMs are not organically different from any other police agency. They are the main institution responsible for maintaining law and order and for protecting and serving the civil population. Rio de Janeiro's Military Police in practice, however, stands out as unique.

As Brazil's military regime came to an end in the 1980s, the PMs, which were one of the state's instruments for repressing the civilian population, were avid to regain the population's trust. This, combined with the violence-as-a-consequence-of-poverty thesis mentioned earlier, greatly discouraged the PMs to use force (even when it was legitimate).

In Rio de Janeiro, the PMERJ's (*Polícia Militar do Estado do Rio de Janeiro*) diminished authority led to the governance voids mentioned earlier that would prove fertile breeding grounds for drug gangs and their resulting violence. Once politicians recognized violence was getting out of hand, a shift in the public security policy agenda returned the repressive function of the PMERJ back to the center of the 'strategy' to fight crime. By then, however, the institution was very weak and subject to political whims of Governors and State Secretaries of Security with big political ambitions.

The new agenda, therefore, had a number of unintended grave consequences. First, the low salaries paid to police, the general weakness of the institution, and the lack of adherence to its career system generated many incentives for bribery, corruption and abuse of power for personal gain, which resulted in the population's perception (particularly among *favela* residents) of the police as an absolutely corrupt and predatory institution, (Perlman, 2009; 2010).

Second, the valuation of the repressive element as a centerpiece of the security agenda turned the PMERJ into one of the most lethal in the world (Leeds, 2007). Past policies gave cash bonuses to policemen who 'committed acts of bravery,' which simply meant killing suspected criminals (or bystanders portrayed as criminals). It was during this time that the saying '*bandido bom é bandido morto*' (the only good criminal is a dead criminal) became part and parcel of Rio de Janeiro's, and Brazil's, posture towards criminals in general and *favelados* in particular.

It is no surprise, then, that the PMERJ is considered a very violent institution. Conveniently, the deaths caused by the police are not counted in the state's homicide rate but in an alternative statistic: *autos de resistência* (deaths of criminals in conflict situations).

> In 2006/7 the number of deaths caused by the police in Rio alone was 1,330 people as compared with 347 killings in the entire United States. In 1995 in Rio de Janeiro, 9.3 percent of all killings in the city ere were committed by the police (Perlman, 2009).

Third, the ensuing violent response by drug gangs provoked an escalation on both sides that introduced a 'war logic' to public security policy. Besides the 'arms race' mentioned earlier, the police also developed elite squads of SWAT-

like special operations forces: BOPE for the PM and CORE for the PC. These elite squads are carefully selected and thoroughly trained, are generally regarded as (much) less corrupt than the rest of the force, and are welcome by wealthier sectors of the population. However, the squads are also criticized for brutality in their use of force in *favelas* and have been accused of a wide range of human rights violations, from torture to executions.

Finally, the combination of a corruption-prone institutional environment, the use of the PMERJ for personal political advantages, and an extremely violent *modus operandi* led to the emergence of Rio's most recent security problem: militias. The militias are groups of retired or off-duty policemen and firemen that take over *favelas* from drug gangs to impose their own form of arbitrary parallel power, seeking to profit from protection and extortion rackets, monopoly over the distribution of cooking gas, cable and other services, and sometimes drug markets themselves.

Many consider the PMERJ to be among the deadliest, most violent, and corrupt organizations in Brazil. Much of the research on *favelas* tends to see the institution as nothing but corrupt and refers to it as a uniform entity. However, the PMERJ is hardly a monolith, and considering all policemen to be corrupt would be a misapprehension.

Corruption in the PMERJ, like 'illegality' in the *favelas*, should be considered as a continuum rather than an absolute category. Figure 5 better exemplifies this scenario.

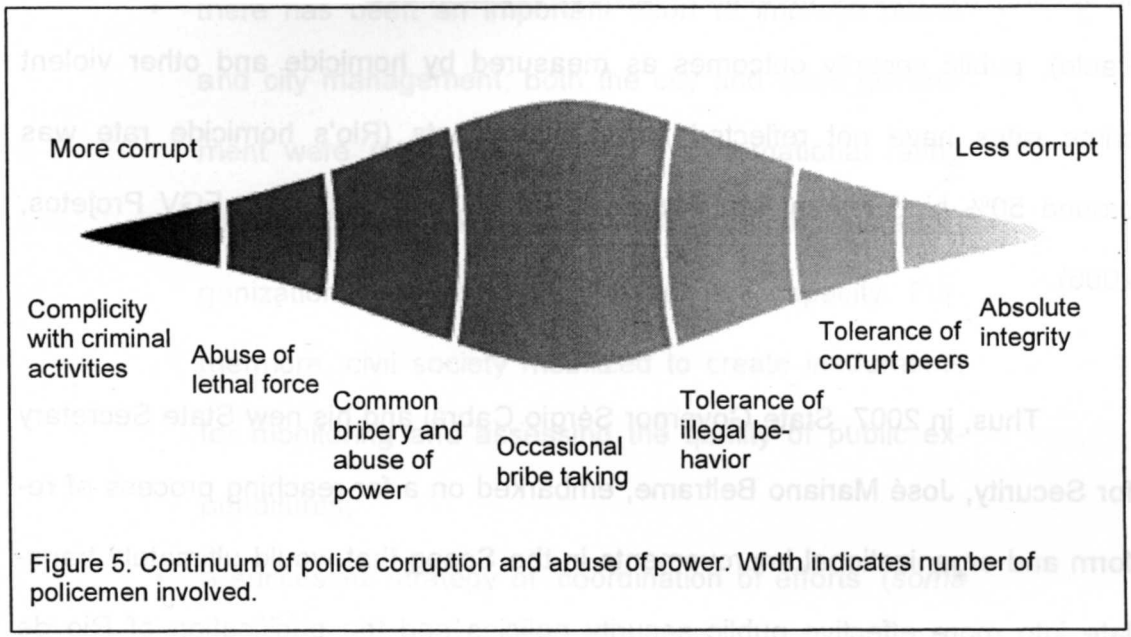

Figure 5. Continuum of police corruption and abuse of power. Width indicates number of policemen involved.

While the institutional factors that provide a breeding ground for corruption and predatory behavior are important, they play a similar role as the broad socio-economic factors behind criminality, such as poverty: by themselves, they will not generate systemic corruption or abuse. It is the combination of these factors with alternative extra-legal sources of income and a lack of oversight and control over the police institutions that provide more motivation for corruption to occur.

Nonetheless, further academic research that explores the true nature of police corruption in the PMERJ is greatly needed.

Besides being criticized for corruption and violence, the PMERJ has also been accused of ineffectiveness. Despite having a large police force (around 45 thousand PMs – 1 for every 400 *cariocas*) and large budget expenditures in public security (R$ 239.83 thousand reals per capita in 2005, 55.9% more than São Paulo), public security outcomes as measured by homicide and other violent crime rates have not reflected these investments (Rio's homicide rate was around 50% higher than São Paulo's in 2005) (Ferreira, 2011; FGV Projetos, 2006).

Thus, in 2007, State Governor Sérgio Cabral and his new State Secretary for Security, José Mariano Beltrame, embarked on a far-reaching process of reform and organizational improvements in the Seseg that would ultimately translate into more effective public security policies and the pacification of Rio de Janeiro. Beltrame's process of reforms was aided by a favorable set of conditions at the federal and state level and to a long chain of incremental policies outlined in the following paragraphs. This background slowly built the momentum the PMERJ and the Seseg are experiencing today.

Aided by Brazil's emergence as a regional power, a big boom in oil exploration off the state's coast, and the generally competent management of Brazil's macroeconomic policies, Rio de Janeiro is experiencing a renaissance. Besides these extraneous factors, Rio's local governments can claim much credit for the

city and state's current boom. Related to public security, these are the most important actions of local governments related to Rio's newfound dynamism:

- there has been an important effort to improve public and city management; both the city and state government were rated credit-worthy by international rating agencies and obtained large loans from multilateral organizations, rebuilding their investment capacity. Furthermore, civil society mobilized to create instruments for monitoring and assessing the quality of public expenditures;
- a successful strategy of 'coordination of efforts' (*soma de forças*) orchestrated by the state government was able to regain investments from the federal government (Urani and Giambiagi, 2011; 4).

In addition, the federal government developed a program, PRONASCI (*Programa Nacional de Segurança Pública com Cidadanía*), comprised of 94 actions to target violence and criminality in Brazil's major cities. Rio's Seseg has mostly benefited from PRONASCI's educational opportunities for its policemen, which lead to increased wages for individuals who participate in the program, and from access to federal funds for investments in law enforcement equipment (Beltrame, 2009). While many researchers and policy makers see PRONASCI as an

umbrella program that spawned the changes Rio is seeing today (Carneiro, 2011; Beato, 2011; Silva and Nougier, 2010; Mizne, 2011), the program's real impact on policy was more subdued; it contributed more to a shift in the policy agenda that prizes holistic approaches to the problem of insecurity over the confrontational approach. Its influence was inductive rather than direct.

At the state level, the Seseg and PMERJ benefited from a long chain of small 'stop and go' reforms (Ferreira, 2011b) that paved the way for the big changes that would happen in 2007. The conditions that proved fundamental for the 2007 reforms were:

- the development of broad crime databases, with inputs from the *Delegacia Legal* program, that generates crime maps cross-referenced with type of crime, time of day, etc. "Rio has now crime databases as good as police departments in the US or Europe" (Ferreira, 2011; 85). In addition, this information was turned into crime statistics and indicators developed by the State Public Security Institute (ISP);
- the division of the state's territory into Integrated Areas of Public Security (AISP) to better align responsibilities and incentives of the PMERJ and the PC (Ferreira, 2011b);
- and the institutional hierarchies, organizational arrangements, and career system of the PMERJ, which proved solid and effective to support performance enhancing reforms.

The 2007 reforms in Rio de Janeiro's security institutions promoted by Bletrame can be better understood as performance enhancements and 'better ways to do things' instead of fundamental structural reforms. The policy is summarized by the State Secretary for Security, José Mariano Beltrame as one that operates on four basic pillars: intelligence, integration, accountability and oversight, and management (Beltrame, 2009).

The pillar of intelligence refers to the use of knowledge from the state's strategic intelligence systems for every, and all, operational and investigative actions. Thus, much investment has been made in professionalization and infrastructure to support the intelligence services. While researchers or policymakers have not pointed it out until now, this reform closely resembles Ratcliffe's (2009) intelligence-led policing concept discussed in the literature review.

Integration stems from recognizing the broad range of actors that can impact public security. Thus an effort was made to integrate and coordinate efforts of the Seseg, the Federal Police, the State Attorney (*Ministério Público*), the Municipal Guard, the Armed Forces, and other actors, and direct them to common goals (Beltrame, 2009).

Accountability and oversight was improved by modernizing and revising the police's structures and by strengthening the Internal Affairs (*Corregedoria*

Geral Unificada) and the Ombudsman (*Ouvidoria*) departments to root out corruption, punish 'bad' policemen, and reform those individuals that have only committed lesser offences (Beltrame, 2009).

Finally, management means that the security institutions shifted to a performance-driven strategy that prizes productivity, quality of services graded by citizens' satisfaction, and periodic assessment of goals measured in terms of outcomes (crime rates) (Ferreira, 2011; 2011b; Beltrame, 2009). To do so, it recognized the organizational value and potential of human resources instead of focusing exclusively on the policing function. "Today, above anything else, the policeman needs to learn how to be a manager of people and resources" (Beltrame, 2009; 77).

The tipping point that allowed such reforms to actually take root and have operational consequences, however, was that the Seseg was finally granted operational autonomy (Ferreira, 2011). As mentioned earlier, public security policy and its institutions had always been subject to political whims and guided by politically ambitious secretaries.

This new autonomy is most evident in Governor Sérgio Cabral's choice of State Secretary for Security, the first time in Rio de Janeiro's history that the position was awarded to a police officer rather than a politician. José Mariano Beltrame had a long and successful career in the Federal Police when he was invit-

ed to head the Seseg by the newly elected government of Sérgio Cabral at the end of 2006. The governor wanted someone from outside the structures of Rio's security institutions and with the technical expertise the job required.

In addition, once Beltrame took over, he was given freedom to appoint his staff and the general commanders of the police, posts that were also traditionally distributed as political spoils. To fill these crucial roles, Beltrame brought in some federal policemen and professional managers, and also promoted very prepared policemen from PMERJ's own career structure, such as Coronel Ubiratan Ângelo (Beltrame's first commander of the PMERJ). These commanders were also given freedom to appoint their battalion leaders, and so on. The chain of command was finally working as it had been designed. The Seseg's new-found autonomy freed the institution from its most vexing political constraints and allowed its policies to be guided by managerial and technical reasoning rather than politics.

These reforms led to two landmark policies that have characterized Rio's success in urban violence reduction. The first was the strategic use of violence indicators and goal setting tied to incentives to promote performance improvements. The goal system divided AISPs into smaller Integrated Regions of Public Security (RISP), and monitored each according to four strategic indicators: murder (*homicidio doloso*), vehicle theft, street robbery, and robbery resulting in death (*latrocínio*). Goals were established relative to historical averages of the strategic indicators in each RISP, while progress was monitored monthly. For

each goal achieved, a ranking system was developed so that each semester, all the policemen in the units responsible for the best ranked RISPs receive pay bonus as incentives (Ferreira, 2011).

The goal system, in place since 2009, is an example of the new kind of policies enacted by Beltrame and his team. It combines knowledge gathered and analyzed by the intelligence systems, integrates different actors by aligning their incentives, provides performance metrics for accountability, and uses managerial techniques to improve public security.

The second landmark policy was the creation of *Unidades de Polícia Pacificadora* (UPPs - Pacifying Police Units), a pacification strategy to reduce violence in Rio's *favelas* guided by a problem-oriented approach. UPPs have been featured in newspapers and media across the globe as Rio's solution for its longstanding problem of urban violence. Despite the objections of its critics, academics, politicians, policy analysts and policy makers have praised UPPs for finally bringing peace to Rio de Janeiro.

Most attention, however, has missed the fundamental element of UPPs as a response of a problem-oriented approach and focused instead on specific aspects of the response, such as the use of community policing (a policing model towards which there is a strong ideological preference in the academic and policing fields) and the combination of the repressive element of law enforcement with

broader social programs (which are considered to be inherently good). To my knowledge, no one has focused on the problem-oriented logic behind UPPs to better understand how they work and why they were chosen over other alternatives. Thus, the rest of the case study will analyze UPPs using the DARA framework proposed in the literature review.

Pacifying Police Units as a response of a problem-oriented approach

At the end of 2006 and the first months of 2007, Rio de Janeiro saw one of its worst outbreaks of violence. Roadblocks set up by drug gangs paralyzed the city, public buses were torched with innocent citizens trapped inside, and policemen were hunted down on and off duty. The ensuing response of the PMERJ led to intense firefights in *favelas* that left scores dead, criminals as well as innocent bystanders. After the crisis was initially controlled, the newly appointed government realized that the traditional approach to the problem of urban violence in Rio de Janeiro was fundamentally flawed and committed to developing a better alternative.

In the meantime, however, policing functions were focused on maintaining order and controlling the violence crisis with police repression. While the new strategy was being developed, the PMERJ performed its traditional duties, albeit its performance was improved by the goal system mentioned earlier. As explained by Col. Ubiratan Ângelo:

> 2007 was horrible... The first thing we had to do was to control the crisis, and, unfortunately, the only way we could do that at the time was with repression... Naturally, there were many dead... Before, the media dictated our policies; if newspapers reported: "A robbery happened in Copacabana", tomorrow there were more patrols in Copacabana... Eventually we were able to move to a stage where the media didn't control our agenda anymore.

Unsurprisingly, the time spent in developing the policy response to the problem-oriented approach was difficult for the Seseg. While the initial crisis had been controlled, the government was heavily criticized by its sluggishness to respond with new policies. Quoting Secretary Beltrame:

> We took a beating in the press the first years, every day. Two things got us through. First, the unyielding support of Governor Cabral; and second, being transparent at all times, you can't promise easy fixes: "you want more policemen, great, but you have to give me time to recruit them and train them," there's just no other way.

Almost two years after taking office, at the end of 2008, the new strategy for public security in Rio's *favelas* was slowly emerging with the pacification of

the *Santa Marta* community. While some saw it an ad hoc improvisation, the intervention was actually the result of a long and thorough process that stemmed from a new problem definition, relied on analysis of its underlying conditions, crafted a response to address the problem's specificity and planned to asses its results to improve the intervention's effectiveness.

Following the intervention's success (as measured by a large reduction of violence), the project was named *Unidades de Policía Pacificadora*, and implementation in other *favelas* began. To this date, 19 *favelas* have been pacified with UPPs and their violent crime rates (mainly murder) have dropped precipitously (Ferreira, 2011), improving the lives of close to 400,000 people that previously lived under the parallel power of drug gangs.

The next sections will describe the logic behind UPPs, focusing on four steps: (1) problem definition, (2) analysis, (3) response, and (4) assessment. Finally, it will conclude with the challenges that lie ahead for Rio de Janeiro's public security policies.

Definition. For many years, Rio's security policies defined the problem as a drug gang problem. That definition led to policies of drug seizures, "kingpin" arrests, widespread incarceration, and indiscriminate repression in *favelas*. As the policies were incapable of curbing the violence (and may have exacerbated it by leading to gang warfare), alternative definitions were proposed. One defined the

problem as the availability of high-powered weapons, and consequently, policies of disarmament and weapons seizures were attempted. Other definitions of the problem centered on the absence of the state in *favelas* and hostile community-police relations spawned unsuccessful projects of community or proximity policing.

Outside the enforcement paradigm, many championed definitions of violence as a consequence of poverty, inequality and exclusion. These pushed policies of urban renewal, social participation, education and job training. While many of these policies may have had positive impacts in their immediate goals (poverty reduction, urban infrastructure, amount of weapons or drugs seized, etc.), none made substantial progress toward the ultimate goal of reducing the harrowing levels of violence.

Therefore, the Seseg needed a new definition that encompassed the most harmful aspect of the problem. In Rio's *favelas*, the most harmful manifestation of the problem is death by firearm, and specially death by high-powered weapon. Using Hugh and Tilley's 'Problem Analysis Triangle', one can see that 'death by high-powered weapon' afflicts mostly *favela* residents (young, male, poor, involved in drug gangs, or innocent bystander), is mainly caused by drug gang members fighting rival factions or confronting the police, and happens in the crooked streets and alleys of the *favelas.*

This definition provides a good starting point because it is closely linked to the ultimate goal of violence reduction, and because it focuses on the most harmful manifestation of the problem. Using this definition to guide the subsequent stages would then force Seseg to conceive of the problem using a harm-reducing frame of mind and keep its strategic response closely tailored to it.

The definition is a starting point, however, because a closer look at the underlying conditions fueling 'death by high-powered weapon' would later yield another working problem definition behind the logic of UPPs: the 'territorial control of communities by drug gangs.' The difference is that the working definition provides a clear opportunity for sabotage (i.e., an opportunity to disrupt the mechanics fueling the problem) and therefore has much more operational value.

Analysis. The analysis stage aims to unravel the dynamics of the underlying conditions of violence in Rio de Janeiro and find a strategic node with operational opportunities for disruption. It looks for the problem's heart.

As described in the introduction, many factors can be considered underlying conditions for Rio's violence. However, to address what causes "deaths by high-powered weapon" in Rio's favelas, three underlying conditions are analyzed. These were selected due to their causal 'proximity' to the problem (how close is the causal relationship between the condition and the problem's manifestation)

and because they fall within the scope of public security policies. They include drug markets, availability of high-powered weapons, and governance voids.

Drug markets. As stated previously, most of the violence in Rio is fueled by conflicts in drug markets. According to victimization surveys, up to 70% of all homicides are drug-related (Ferreira, 2011b). Since cocaine and other drugs are traded in illegal markets, violence is the prime tool to enforce contracts and keep competitors at bay. Furthermore, the state of 'unrule of law' in *favelas* means that those individuals or groups that are more effective in their use of violence (i.e. more lethal) can seize larger portions of the drug market and earn higher profits. Thus, individuals organize themselves into drug gangs to better control portions of the market.

The organization of Rio's drug gangs is closely tied to the territories they control. While different *favelas* may be under the command of one faction (i.e. CV, AMA, TCP), the gang in each *favela* operates more like an independent cell aligned with the larger 'commandos'. There is one 'owner' (*dono*) responsible for the region's operation; his subordinates include 'managers' (*gerentes*) that take care of drugs and arms supply, 'couriers' (*aviões*) that distribute the drugs, 'scouts' (*olheros*) that warn when the police or rival gangs enter the *favela*, and heavily armed 'soldiers' (*soldados*) responsible for fighting the police and rival gangs. The gang's main activity is to supply the consumers of Rio's affluent zones with cocaine and other drugs. However, pressure in the form of crack-

downs and seizures has led the gangs to diversify into other criminal activities such as carjacking, robbery, and extortion rackets. While they act mainly in the *favelas* they control, the gangs occasionally leave their territories to conduct attacks on rivals or to intimidate 'peaceful' parts of the city to pressure the government.

The most effective way to dismantle Rio's drug gangs would be to either cut the demand for drugs or drastically reduce the profits they earn in the black market. However, Rio has one of the highest rates of cocaine consumptions in the world, and policies targeted at reducing consumption have been largely ineffective and are long-term oriented, minimizing their operational opportunity. On the other hand, the most effective tool to reduce profits in the black market, drug legalization, is a highly controversial alternative, one that it is unproven in Latin America and, even if eventually approved, poses tremendous implementation challenges. Therefore, policies on the demand side do not offer many plausible operational alternatives to reduce 'deaths by high-powered weapons' in the short term.

In terms of harm reduction, it is possible to decouple the drug markets' effect on violence. International experience shows that not all drug markets are necessarily as lethal as Brazil's (e.g. United States and Western Europe); therefore it is important to look at other underlying conditions and explore their rela-

tionships to find what is making drug markets in Rio particularly violent. Quoting Coronel Ubiratan Ângelo:

> Think of AIDS. AIDS is spread by sexual intercourse, but sex is pleasurable. So if we had focused on getting people to stop having sex we would have never controlled the AIDS epidemic. Therefore we had to focus on its specific harm-enhancing aspect: unprotected sex. Then the task is not getting people to stop having sex, but to start using condoms, a far easier task. Drugs are also pleasurable to their users, so instead of asking ourselves how can we stop people from using and dealing drugs, we must ask ourselves why the drug trade is so harmful in Rio de Janeiro. To me the answer is the high-powered rifle.

Availability of high-powered weapons. This underlying condition has the closest causal relationship to the most harmful manifestations of Rio's urban violence phenomenon; a lack of available weapons would mean fewer murders. High-powered weapons dramatically increase gangs' lethality. Not only does it make them more prone to resolve conflicts through violence, it also increases the probability of death when confrontations occur due to the weapons' higher calibers and rapid fire. In addition, since most *favelas* are on the hills of Rio, stray-

bullets manage to kill many innocent bystanders downhill, far from the areas of conflict.

These weapons also raise the stakes for the police. A criminal using automatic rifles, grenades, high-caliber sniper rifles and antiaircraft guns is much harder to arrest. Thus, the weapons reinforce the logic of war that permeates the traditional approach of the PMERJ. Naturally this leads to rising tolls of death in conflict, whether of criminals, policemen or innocent bystanders.

To address the weapons problem, many policies have been implemented. From the enforcement side, these include weapons seizures, increasing armor protection for police vehicles and personnel, and investigation of the arms supply chain (which links Rio's drug gangs to transnational criminal organizations like Colombia's FARC). Other 'softer' approaches, such as weapons-for-cash voluntary disarmament schemes (with the help Viva Rio ONG), have also been tried. While these combined approaches may have been successful in taking thousands of weapons off the streets or in arresting arms smugglers and dealers, they have not been effective in reducing 'deaths by high-powered weapon'.

The drug gang's demand for high-powered weapons derived from the high demand for drugs has been more powerful than any policy aimed at reducing the amount, or power, of weapons in the gangs' hands. The reason for these policies'

ineffectiveness is that the primary motive for the gangs' pursuit of such weapons is the need to enforce territorial control.

Governance voids. Coupled with governance voids, territorial control is an essential element of Rio's urban violence. In the absence of official authority to impose law and order, 'parallel powers' emerge to reconfigure social interactions. In Rio's *favelas*, drug gangs serve this purpose. In their territory, gang leaders are the de-facto authority. This allows them to control a portion of the drug market, subject the local population to 'protection' fees, and impose their own version of law and order.

Since territorial control brings high returns to drug gangs, it increases competition between rival factions for the control of territories. In that setting, gangs use their high-powered weapons to keep enemies away from their turf and utilize their gang's soldiers to enforce that goal. The lack of policing in *favelas* means that there is no need to hide their guns or to limit their lethality, so gangs that use violence (or the threat thereof) more effectively are more successful than their competitors.

Rio's geography makes its *favelas* islands of informal urban sprawl in a sea of otherwise 'normal' cityscape. Therefore, most *favelas* have few points of entrance and their boundaries are clearly limited either by nature or by the rest of the city. This makes them relatively easy to control, given that the gangs have

enough force. To enforce their grip, gangs blockade the roads, place sentries and scouts at the entrances, question anyone that enters, and control the vans that residents use as public transportation. These coercive methods are backed by the threat or use of gun violence.

Hypothesis development. By analyzing the dynamics of these three underlying conditions, it is evident that 'territorial control' is a very important node in the problem's complexity; it is the harm-enhancing aspect of drug markets. This raises the question of what would happen to Rio's violence if drug gangs were striped of their territorial control. The analysis so far points out that without it, the violent aspect of the drug trade would be diminished. However, to prove that it is the 'heart of the problem' using analytical tools would be very complicated. To see if the hypothesis was correct, then, the Seseg conducted an experiment.

Response. In December 2008, troops of the BOPE elite squad took control of *Santa Marta*, a *favela* near the Botafogo neighborhood of Rio de Janeiro. Episodes like this were not uncommon in Rio. Generally, the police came in heavily armed, arrested or killed wanted criminals, seized drugs and weapons and then left the area, leaving the underlying conditions unchanged and the *favela* ripe for gangs to regain control.

This time, however, the police never left. Instead, a large special unit of policemen trained in conflict resolution and mediation techniques, respectful of

human rights and sensitive to the community's needs was established in the area. This unit had specific orders of keeping the peace and rebuilding police-community relations through trust and cooperation.

In the following months, two larger communities were subject to the same interventions: *Cidade de Deus,* and *Batam.* Then, the project of the *Unidades de Polícia Pacificadora* (Pacifying Police Units, UPPs) was born. The success of these initial experiments in reducing levels of violence in the communities proved that the hypothesis of 'territorial control' as the heart of the problem was accurate. Furthermore, the hypothesis provided a clear operational opportunity: taking back the 'occupied' territories. As mentioned, BOPE had long been able to recover the *favelas*; the problem was how to keep them free of the drug gang's grip once BOPE left. To solve this issue, the PMERJ developed special units trained in community policing techniques, formed mostly by new recruits (to avoid corruption issues). A large unit of focalized ostensive policing in the area would prove a serious obstacle for drug gangs attempting to recover their turf, while their strong community orientation would ease their relationship with the residents, who were used to not trusting the police. This would encourage the perception of the police not as invaders of enemy territory but as a part of the community.

The UPP's strength lay in that it did not try to solve the entire problem posed by drug gangs but rather targeted its most harmful aspects. The project

was clear on what it tried to achieve and what it did not. Specifically the UPP's goals were:

- to regain State control of communities under the influence of criminal groups;
- to bring peace and public security to *favelas*; and
- to break the 'logic of war' in Rio (Silva and Nougier, 2010)

Also significantly, the UPPs stated clearly that their goals did not include:

- to end the drug trade and other forms of criminality;
- to be a solution for all communities; and
- to solve all socio-economic problems in *favelas* (Silva and Nougier, 2010).

The UPP strategy was implemented in four stages. First, the BOPE invaded the gang's controlled territory to reclaim it. Guided by effective intelligence, this stage involved hundreds, and sometimes thousands, of elite heavily armed policemen, armored cars (in some cases lent by the armed forces), and air support. Second, during the stage of stabilization BOPE stayed in the *favela* for several days or weeks to eliminate any resistance and maintain law and order until the new UPP units could be installed in the territory. Third, during occupation, the UPP restored law and order using community-policing techniques, which involved reaching out to community leaders, organizing forums to hear the residents'

grievances, and mediation and conflict resolution. Finally, the fourth stage of post-occupation maintained the community-policing model while the area also benefited from a blanket of social programs to promote development, education, job training, urban renewal, and social participation (Silva and Nougier, 2010).

This kind of strategy, known as 'weed and seed' (Ferreira, 2011b), is appropriate to the problem's nature. Using Sparrow's typology of harms (2008), it is evident that Rio's problem of 'territorial control of communities by drug-gangs' was both a 'harm in equilibrium' and a one with 'conscious opponents'. Thus, the first two stages of the intervention (invasion and stabilization) dealt with the adapting nature of conscious opponents. The use of intelligence and the overwhelming operational superiority was crucial to break the criminals' defenses and adaptation capability. On the other hand, the last two stages (occupation and post-occupation) sought to disrupt the underlying dynamics that kept the problem in equilibrium. The ostensive policing, the improved community relations, and the improvement in social conditions all contributed to a new equilibrium that made the *favela* less vulnerable to drug gang control.

According to Clarke and Eck's 'Revised Crime Triangle' (Braga, 2010; 28), the UPPs focused on the 'location' aspect of the problem and introduced new 'managers' responsible for their safety. Furthermore, the response provided an excellent example of problem-oriented policing in the sense that it was guided by a close analysis of its underlying conditions and it looked for tools outside the

traditional policing paradigm. More explicitly, it combined intelligently the police's resources with programs from other agencies to find 'better ways to do things' and achieved the ultimate goal of violence reduction.

Many critics have rightly pointed out that many of the central elements of UPPs have long been used in *favelas*, and thus remain skeptical of their effectiveness today. Therefore, it is important to examine the main differences between this intervention and others in the past to understand why UPPs are indeed more effective.

1. Invasion and stabilization: BOPE has a long tradition of taking back *favelas*, which generally results in more violence due to the confrontation with gangs. The difference with UPPs is the difference in goals. Before, BOPE entered to conduct arrests or seize weapons and drugs, and its goals were centered on individuals or the gangs themselves. In this project, the goals are explicitly focused on the territory, minimizing the importance of arrests and seizures. Actually, provisions are taken to minimize conflict as much as possible. The intelligence-led strategy is carefully planned and kept secret to avoid gangs from building up their defenses. Additionally, days before the invasion, the intervention is made public. Critics who disagree with such an approach because it gives criminals a chance to flee overlook the fact that that is precisely the point. Since the new understanding of the problem is that gangs derive their strength from the 'territorial control,' flee-

ing the turf means they will pose little harm. Therefore, the strategic use of communication is actually a means to reduce the potential for confrontation.

2. Occupation: Community policing has been tried in Rio's *favelas* for more than a decade. Past community-policing projects, such as GPAE (*Grupo de Policiamento para Áreas Especiais*) unsuccessfully tried to start community policing projects in *favelas*. An analysis of their shortcomings, however, reveals crucial differences between the UPP. First, the GPAE project was sponsored by the PMERJ without the full commitment of the Seseg or the governor; thus, its resources were much more limited, while political commitment to the UPP starts with the governor and has translated into continued budget expenditures (even in times of economic contraction, Ferreira, 2011). Second, the policemen sent to the GPAEs were hardly trained in community policing, whereas the UPPs are made of mostly new recruits trained for community policing and paid a special bonus that almost doubles their salary (Ferreira and Britto, 2010). Third, the sheer number of policemen devoted to UPPs dwarfs previous experiences (Rio's inhabitant to policemen ratio is around 405, while UPPs have an average of 105 inhabitants per policemen, Ferreira, 2011; Silva and Nougier, 2010). And fourth, the GPAEs were not preceded by a strategic reclaiming of the territories like in the case of the UPPs, thus the GPAE policemen would either have to risk their lives daily just to get to their station or become involved with the criminals.

3. Post-occupation: While law enforcement had long been absent in favelas, the idea that other official programs were not present is incorrect. *Favelas* have long been beneficiaries of social and urban development programs. The main difference today is that after a *favela* has been pacified, the obstacle of violence and fear is removed, allowing social workers more freedom to develop their projects. In addition, the 'UPP Social' project (in the hands of the Pereira Pasos Municipal Institute for Urbanism – IPP) organizes all of the available services from a broad array of actors (governmental and non-governmental) to articulate and coordinate with a UPP their efforts towards shared goals in each *favela*. In addition, it organizes monthly town-hall meetings in each community to bring together members of the community, its leaders, and representatives of all organizations working in the *favela*, including the police. Thus, while it is true that social development programs were already present, under UPP they are more effective since they are coordinated and combined with social participation schemes.

Ultimately, the UPP project is not a radical new form of policing but a substantial improvement upon existing means. Its strength lies in its problem-oriented harm-reducing mode of thought. It recognizes that the problem of violence in Rio de Janeiro's *favelas* is unique, it explores its underlying conditions, and it exploits an operational opportunity to control it. In other words, it adapts the

organization to the problem instead of trying to adapt the problem to the organization.

Assessment. The assessment of the UPP policy can be divided into three types: evaluation of its impact on the problem, reflections on what the organization can learn from the policy process; and how it has improved police accountability.

Impact. It is too soon to tell what has been the precise impact of UPPs on urban violence in Rio de Janeiro. Furthermore, the lack of a methodologically careful evaluation using randomized controlled experiments leads many researchers to conclude that the recent drops in violence in *favelas* may not be related to the UPPs but are part of larger socioeconomic trends. However, as Sparrow (2011) points out, social science tends to rely too heavily on this sort of quantitative and randomized evaluations and overlook that problem-solving in policing, since it is an operational approach, is better evaluated using other kinds of techniques.

Nonetheless, even without these rigorous examinations, it is possible to see important reductions in urban violence in *favelas* with UPPs. As Ferreira (2011b) points out, UPPs rapidly suppress the problem of carrying of high-powered weapons, which reduces crimes rates to levels near zero. While the researcher is careful not to assume causality, he notices that AISPs that were ben-

efited with UPPs and had high homicide rates in 2006 saw their rates drop dramatically in 2010 (for example, Grande Tijuca had 22 deaths per 100 thousand inhabitants in 2006 and saw its rate drop to 7 in 2010; Botagogo's rate of 16 deaths per 100 thousand inhabitants in 2006 fell to 6 in 2010; Jacarepaguá, where Cidade de Deus is located, saw yearly drops of 20% in its murder rate after the UPP was installed) (Ferreira, 2011). Thus, it is quite clear that homicides drop in communities with UPPs, particularly those that are drug-related and committed with high-powered weapons.

Yet when reviewing other crime indicators, areas with UPP see a rise in calls for service and anonymous crime reports, as well as increases in some non-violent forms of robbery, rape and domestic violence. According to the police and researchers, these increases are due to two factors. First, these communities had previously no presence of law enforcement; thus the arrival of the UPP leads to the detection of many crimes that previously went unreported. In addition, as the community learns to trust the police they begin to report more crimes and rely on police to help with their problems. Additionally, UPP communities had traditionally been subjected to alternative forms of law and order imposed by drug gangs that regulated most of the residents' lives. When UPPs disrupted that order, some residents engaged in behaviors that were very strictly forbidden by gang leaders (such as robbery, rape, and domestic abuse), which accounts for a real increase in these offenses.

However, as UPPs take root in the communities, they can handle these problems and resolve them in a democratic and lawful way, as opposed to the use of arbitrary force of the gangs (e.g. summary executions, corporal punishments, etc.). And finally, the rise in these types of crime is generally not as harmful as the more serious violence that reigned before the UPPs.

Besides crime indicators, assessment of the UPPs' impact has relied on surveys in Rio's *favelas*. The surveys – conducted by independent consultants in *favelas* with and without UPPs – indicate that those communities that have benefited from the policy perceive their neighborhoods as being much safer after the UPP was established; they also report better relations with the police. In addition, they report that armed men, drug dealing, drug consumption, shoot-outs and executions have either completely disappeared or have greatly diminished after the UPP was established (IBPS, 2010, FGV, 2009).

Also, UPPs have spurred a number of positive spillover effects. Besides the blanket of social services improving socioeconomic conditions, private companies are also investing heavily in the communities. For example, drug gangs and militias carried out the distribution of water, electricity, television, broadband and gas services in favelas illegally. After the pacification process, utilities providers were now able to regularize thousands of improvised connections in the communities and replace them with quality services at a lower 'social' tariff. There have also been advances in the regularization of land tenure, improve-

ments in mass transport infrastructure, and an expansion of entrepreneurship. An indicator of the communities' improvement is higher real estate prices and investment, which reveals the market's confidence in the pacification process. Ultimately, communities with UPPs slowly become less *favelas* and more a regular part of the rest of the city.

Finally, the UPPs help reduce the bridge that has divided *favela* residents from the rest of *cariocas* and conferred on them an incomplete or 'second-class citizenship'. By returning control of *favelas* to the State and introducing mechanisms for participatory decision-making, democracy is strengthened, which in turn makes *favelas* less prone to corporate and clientelist political practices. Having tasted the benefits of the rule of law and the whole range of improvements in quality of life that it brings, *favela* residents are less likely to give their votes to candidates that do not take them seriously; instead, they have become full citizens.

Using Scott's framework of responses (Braga 2010), since drug trafficking still occurs in Rio's *favelas* (as acknowledged by the interviewees), UPPs can be catalogued as a kind of response that 'reduces the harm created by a problem'. By focusing on its harm-enhancing aspect (territorial control), UPPs effectively control the most harmful aspect of the drug trade in the short term while not totally eliminating the problem. In addition, since UPPs also target other underlying conditions (such as poverty and exclusion) with broad social development strate-

gies, the policy could also be catalogued as one that 'substantially reduces a problem,' particularly in the medium-to-long term, since it tries to eliminate the conditions that fuel the problem in the first place.

Learning process. An assessment of the process that developed UPPs can serve two learning goals. First, it helps the Seseg fine-tune its policies to make the project more effective. Secondly, it generates knowledge that can aid other policing and security institutions in developing better violence control responses.

For the first goal, assessment has certainly proven useful. Coronel Robson da Silva, General Coordinator of the Pacifying Police Command, explained when interviewed that there is no recipe for UPPs and that instead each *favela* must be carefully studied and monitored to determine how the intervention will be conducted, emphasizing the importance of continued assessment. Furthermore, Secretary Beltrame explained that each community is closely monitored to guide the entire route of the project:

> If I were a politician, I would have made commitments and promises to have established a certain amount of UPPs by a given date, but that's not possible. Instead we advance contingent on how the problem responds in each commu-

> nity... For us, it's like a laboratory, we experiment with approaches, and we learn what works and what doesn't.

For the second goal, however, there remains much work to be done. While some scholars have described UPPs, few have looked closely at the process that developed them, focusing instead on the nature of the intervention itself or its sociological impact, and particularly on its use of community policing. To better address this issue, it would be advantageous for the practitioners behind the project to report their experience at length in case studies and similar works, with emphasis in conveying its problem-orientated mode of thought. This kind of assessment not only helps to generate knowledge for academic purposes and to aid other cities, it also helps the Seseg fine-tune its organizational structures and procedures to make the problem-orientation a systematic feature of its ethos.

Case Outlook. Rio de Janeiro certainly resembles a different city compared to four years ago. While much of the turnaround is attributable to better economic conditions, an oil boom, and improved public management in general, the UPPs have played a large part, at least symbolically, in the city's revival. If violence in *favelas* was once seen as an insurmountable problem that threatened the viability of the entire city, UPPs have demonstrated that it is possible to reduce very high levels of urban violence with problem-oriented policies. The UPPs were certainly an important factor in the 2009 state elections, which resulted in re-election for Governor Sérgio Cabral.

It is also important to mention the roles other policy actors had in the UPP strategy. NGOs and other civil society organizations have been crucial to the strategy's success, particularly those already working in *favelas*. Particularly in the fourth stage of the project (the UPP Social), NGOs help fill vacuums in the provision of crucial services and social development projects, while civil society organizations (such as churches) have been powerful agents promoting social participation and community-building. In return, the organizations have benefited greatly from the UPPs since they no longer have to negotiate with drug gangs to work in *favelas*.

Universities, research institutions and academics have also played an important role. Academics and consultants from FGV participated in the policy formulation process, and have accompanied the implementation phase with evaluations. Also, symposia have been organized to present research that explores how the UPPs have reconfigured social relations in *favelas.*

The private sector has welcomed the UPPs due to its many positive spillover effects that make the city more attractive to business and investment. However, it has also recognized attractive business opportunities in the pacified *favelas*. By offering special social tariffs, and products catered to *favela* residents, the private sector quickly recognized the growth potential that the immense neglect-

ed costumer base represents, and has thus committed to invest in these neighborhoods.

Public opinion and the media have been generally supportive of UPPs, however, the project does have many critics. One of the most persistent criticisms is the public perception that UPPs are only being installed in anticipation of the 2014 World Cup and the 2016 Olympic Games and that once those events have passed the units will be dismantled. Yet, after the pacification of *favelas* is understood as a response of the problem-oriented approach and not simply as an ad hoc improvisation to urban violence, this wrong perception is overcome. In addition, much of the media criticism focuses on isolated events and violent episodes in some *favela* invasions; attention is paid to how many traffickers were arrested and how many weapons and drugs were seized, instead of understanding the underlying logic and overarching goals of the policy.

The city still faces many challenges in public security. Numerous *favelas* remain under the grip of drug gangs and militias, and some pacified communities have experienced attacks by drug gangs attempting to regain their territories. Police corruption and violence remain of concern and have yet to be resolved. The investigative function of the security apparatus and the justice system continues to be minimal, with a very low rate of prosecutions per number of crimes, and the prison system is still very deficient. Broadening the scope, some argue that the

social development programs of UPP Social have been too slow and lacking in effectiveness, undermining the long-term success of UPPs.

And finally, it remains to be determined if the new paradigms and modes of thought that Secretary Beltrame brought into the Seseg and public security agendas will outlast his tenure. One of the biggest unknowns is if the organizational structures, systems and processes that support these new paradigms have become part of the ethos of the Seseg and the PMERJ, and whether they will remain regardless of the governor or party in charge. So far, Brazil has proven that when it finds policy formulas that work, it can remain faithful to them, even if such policies originated with different parties. Since one of the most important aspects of this new paradigm is the professional management of public security, instead of using it as a token of political bargains, the biggest supporter of the UPPs, and the problem-oriented mode of thought, will be the citizens of Rio, who will decide with their vote the nature of the public security policies in their city.

Lessons from Rio de Janeiro: Policy Implications

Drawing lessons from case studies does not necessarily imply that policies implemented in the case in question should be replicated elsewhere. This error is exceedingly common in the fields of policing innovations and public security policies. In most cases, this happens because cities rush to apply what appear to be effective policies without actually understanding why those policies were effective and why they were suitable to the problem they originally addressed. This occurs

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when the focus is on the 'products' of the case (the actual policy interventions) rather than on the 'process' of the case (how those policies were developed).

It would be a gross misapprehension to conclude from this lessons that the actions done by Rio de Janeiro must be replicated by cities facing similar problems of urban violence. The real value of the problem-oriented approach lies not in the specific solutions themselves but in the institutional 'thought process' that led to their crafting. This 'thought process' is what cities should seek to replicate. Thus, the true value that can be drawn from the case study is not to see 'which policies worked' but to understand 'how problem-orientation in public policy can be developed'. With this in mind, the case of Rio de Janeiro offers the following lessons for other cities dealing with urban violence.

1. The problem-oriented approach can successfully reduce urban violence

The UPPs are an effective response to the problem of urban violence that Rio suffers. As the case showed, its effectiveness lies in its targeting of specific aspects of the problem – the most harmful aspect – using a problem-oriented mode of thought instead of trying to solve everything at once. It is also effective because the analytical process that unravels the underlying dynamics of the problem point to specific interventions that should be effective in controlling it. Thus the Seseg and the PMERJ adapted to the problem instead of trying to fit the problem into their traditional operational functions. Finally, while the entire problem of urban violence in Rio is far from total resolution, the UPPs represent a bet-

ter way to engage with public security policies and help free the city from the destructive spiral that was characteristic during the last 30 years.

This lesson, however, has two caveats. First, must be stressed that the effectiveness of the approach is not the policy intervention itself (the UPP as a product), but the problem-oriented process that developed the UPP. While this case study was constructed using a four-stage model of definition, analysis, response, and assessment, there are many other models of problem-solving approaches. The selection of the appropriate model or method of analysis for a given situation must be determined by the needs of the institution or organization responsible for reducing urban violence in other cities; ultimately, *what must be apprehended is the problem-oriented mode of thought.*

Second, the problem-oriented approach takes time. As seen in the case study, the Seseg began deploying the first UPP experiment almost two years after the Cabral Government was formed. The Boston Gun Project also involved several years of analysis and testing hypotheses before Operation Ceasefire was rolled out. Since each problem of urban violence is unique, the process of diagnosis and analysis requires a serious time commitment. Practitioners seeking to implement a problem-oriented approach must not expect or promise quick responses. On the other hand, since problem-oriented responses are focused on specific concentrations of harms and attack vital underlying conditions, they can

have positive impacts quickly. Therefore, time spent in the diagnostic phases of the approach can be reaped in the form of effective responses in the near future.

In addition, Rio's problem of urban violence is extremely complex and seemingly intractable using the traditional policing approach that treated it as a single, large problem. However by following the problem-oriented approach, the case shows that once the problem is pieced apart, analyzed and re-defined, responses emerge to solve specific concentrations of the problem. By focusing on those concentrations that generated the most harmful effects, Rio was able to tackle urban violence much more effectively.

Besides understanding how to make large problems more manageable, this lesson also teaches that the problem-oriented approach can generate operational opportunities even when the phenomenon cuts across several jurisdictions and levels of government. A complex mix of international, national, state and local dynamics fuel Rio's urban violence problem; thus, it concerns foreign institutions (DEA, Interpol, UNDOC, etc.), national institutions (Federal Police, Justice Ministry, federal courts, Armed Forces, etc.), state institutions (Seseg, PMERJ, PC, Public Ministry, state courts, etc.) and municipal institutions (Municipal Guard). And while improved integration between actors has been part of Rio's turnaround, UPPs have been successful in their identification of specific, local, dynamics underlying the problem, dynamics that made urban violence a feature of the city.

2. The problem-oriented approach requires a proper institutional framework

Rio's case study also shows that an appropriate institutional framework is fundamental for the problem-oriented approach to take root. This institutional framework, however, can take many shapes. Basically, it should have enough operational capabilities to muster the necessary resources the response might require. Additionally, a systematic decision-making process based on strategic intelligence is strongly suggested.

There is not a single formula for law enforcement and public security institutions that takes full advantage of the problem-oriented approach. Goldstein's (1979) problem-oriented policing proposed integrating the analyst's role into police precincts and involved a certain amount of decision-making decentralization to beat level police officers; however, its practical implementation has been limited. Rio's institutional framework is more akin to Ratcliffe's (2009) intelligence-led policing paradigm, which proposes a centralized decision-making model and employs problem-oriented processes to develop appropriate responses.

Likewise, a clear legal framework that unequivocally distributes responsibility for public security also facilitates the institutional framework. In Brazil, public security is constitutionally the responsibility of State governments, thus, there was little room for the Seseg to lessen its obligation. Finally, the case shows that an institutional framework can be improved greatly by acquiring operational au-

tonomy in a politicized environment. With it, the institution can take the necessary decisions based on technical knowledge instead of yielding to political pressure.

This lesson is similar to those offered by other experiences of violence reduction and by criminology in general: institutional capacity is crucial. Governments facing urban violence are right to invest in building institutions; they are an essential part of the solution. It is a time-consuming and expensive process, and yet, it is absolutely necessary. Public security institutions should be operationally capable, intelligent in their decision-making, operate within a clear legal framework and relatively autonomous.

However, *institutions are not going to reduce urban violence by themselves*. As the case shows, Rio had begun its institutional reforms a decade ago, and yet, it did not manage to successfully reduce urban violence until it incorporated the problem-oriented approach to its mode of thought.

3. Human resources with appropriate competences are vital

People drive institutions. In addition to an appropriate institutional framework, the problem-oriented approach relies on people with very specific competences. For institutions to take advantage of the institutional frameworks described in the previous lesson, attention must be placed on the quality of human resources. Since the approach requires the use of sophisticated research meth-

ods and analytic techniques, personnel working in public security institutions should know how to employ these tools, or at least recognize their importance.

In essence, this lesson stresses the importance of professionalization of human resources in public security institutions. To achieve it, institutions can benefit greatly from sound career systems and by attracting candidates with solid academic careers in fields that vary from law to anthropology, for example. In Rio's case, while the PMERJ might not necessarily be an exemplar institution, its career system is well defined and structured. Officers receive special and constant training and education (in the institution's academy and in others).

With this kind of mechanisms, public security institutions can build a critical mass of qualified human resources without which the problem-oriented approach could not survive. And while their importance is recognized, human resources alone are not sufficient.

4. Political will and leadership are essential

Little can be accomplished without political will and committed leadership. As seen in the case study, many of the institutional reforms and structures that were fundamental to the UPPs were already in place before the Cabral Government came into office. The tipping point, however, was the appointment of Secretary Beltrame to the Seseg. This required much political will from Governor Cabral, since the post had always been strongly contested by politicians. In addition,

granting the Seseg operational autonomy and standing by it – even as the government was severely criticized by the media during its first two years in office before it rolled out UPPs – was also a test of the political will needed to support problem-oriented projects.

Political will is essential to shield public security institutions from partisan and corporativist demands. It bids the time required to conduct the analyses the problem-oriented approach requires without falling for easy fixes and short term demands.

Closely related to political will, institutions need their leadership seriously committed to the problem-oriented approach. Without this commitment, problem-solving techniques, institutional frameworks, and the critical mass of qualified human resources will remain trapped under traditional paradigms and fail to develop innovative solutions to urban violence.

5. The problem-oriented mode of thought is paramount

The four previous lessons direct governments towards specific actions they must do to develop policies that reduce urban violence: they must follow the problem-oriented methodology, they should build capable institutions, they must develop a critical mass of qualified human resources and they need to exercise political will and leadership.

However, while those lessons are recognized as an important, and essential, prerequisite to developing problem-oriented policies, what this final lesson entails is basic: they are not enough.

If public security policies are not driven by a shift in paradigm that fully embraces the problem-oriented mode of thought, solutions will remain elusive. This shift of paradigm means that policy makers, and institutions, must adopt new ways to think about public security. The problem-oriented mode of thought then, is a paradigm that understands that *policies need to be driven, above all else, by an unwavering commitment to the profound understanding of the problem.*

Only then, when practitioners and their institutions are freed from constraining mindsets, will they be able to develop policies that tackle urban violence according to its nature, and reduce one of the most harmful aspects of human interaction.

Conclusions

While there may be no easy solutions for the problem of urban violence, the case study suggests that developing them rests upon a simple and straightforward idea: to think differently about problems; the key is to never settle on preconceived notions that dictate what problems cause urban violence. By breaking free from entrenched, static ways of thinking and the responses our institutions

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are built to produce, the practice of public security policy can become more effective and even generate public value.

Even seemingly simple ideas, however, can be difficult to put into practice. This case study presented several caveats that made this paradigm shift possible in Rio, yet two main obstacles remain: changing organizational culture and integrating better theory and practice.

These two obstacles are large and extremely important, and while they may have been mentioned in the case study, their complexities make them worthy research subjects in their own right. First, organizational culture has long been a field of scientific inquiry, yet studies that explore how organizational cultures can be transformed to embrace the problem-oriented approach in particular, and other intelligent modes of organizational thinking in general, would be of great use to the field of public policy. Second, it is surprising that theory and practice in public policy are so divided. Thus, research work that integrates academics and practitioners in productive functioning partnerships, where no side is more important than the other, is needed. Such work should be guided by abductive reasoning and a process of discovery that emphasizes pragmatic goals, rather than simply advancing the frontiers of knowledge (it is not meant that all social science should be pragmatic, just that there should also be a more practical side of research).

Finally, while much remains to be learned, the main goals of this thesis will be achieved if public policy makers adapt some of its lessons in their formulation of public security strategy. If these lessons can spark a change in how we think about public security policies, then we can make immense strides towards conquering the harrowing ills of urban violence.

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Appendix: In-depth interviews

Interviewee	*Profile*	*Date*	*Place*
Dr. Carlos Iván Simonsen Leal	President of the Getúlio Vargas Foundation (FGV)	July 13th 2011	Getúlio Vargas Foundation
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-13Entrevista_CarlosLeal.zip			
Dr. Marco Aurélio Ruediger	Professor and researcher of the FGV	July 15th 2011	Getúlio Vargas Foundation
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-15Entrevista_MarcoRuediger.zip			
Dr. Vicente Riccio	Professor and researcher of the FGV	July 19th 2011	Getúlio Vargas Foundation
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-19Entrevista_VicenteRiccio.zip			
Col. (ret.) Ubiratán Ângelo	Former Commander of the PMERJ. Currently coordinator of Human Security at Viva Rio ONG	July 27th 2011	Viva Rio ONG Headquarters
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-27Entrevista_UbiratanAngelo.zip			
Col. Robson Rodrigues da Silva	General Coordinator of the Pacifying Police Units, PMERJ	July 28th 2011	PMERJ Headquarters
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-28Entrevista_RobsondaSilva.zip			
Sec. José Mariano Beltrame	Rio de Janeiro's Secretary of State for Security	July 28th 2011	State Secretariat for Security
Interview audio: http://prestevez.com/AudioEntrevistas/2011-07-28Entrevista_JoseBeltrame.zip			

Appendix: Interview protocol

Context

- What are the historic challenges for public security in Rio de Janeiro?
- How was the situation of urban violence in 2006/2007?

Problem definition and Policy formulation

- Has there been a shift in paradigm to understand public security? How is it different from past paradigms?
- How was this paradigm developed? Where does it come from?
- What is the main objective of UPPs? Are UPPs a harm-reduction policy?
- What do you understand by harm-reducing policies?
- How important is a communication strategy in public security policy?
- Do UPPs use communication strategies to be effective? With criminals? Is it a formalized strategy?
- How did academic research influence the shifts in public security policy in Rio? Was it a direct influence? How does the state government encourage academic research in the field of public security?

Formulation Process

- Has there been a professionalization of the policy process for public security policies in Rio? How so?
- Does the government study public security policies from other cities/countries? What does it seek to learn?
- How important are analytic processes to understand problems for the policy formulation process.
- What kind of education should policy makers have to develop better security policies?

Policy actors

- Who are the main actors participating in the public security policy formulation process today? How do they participate? Is it a negotiated process? Is it conflictive?
- What channels do non-institutional actors have to influence the policy formulation process?
- What is the role of universities, research outfits and think tanks in the formulation of public security policies?
- What is the role of the federal government?
- How do governmental institutions that are not responsible for public security, but are involved in the UPPs, participate in the formulation process?

Policy windows

- What sparked this change in public security policies? Why now? Why wasn't it possible to do before?
- How important was Governor Cabral's political will?
- How was PRONASCI's influence?
- How were short term demands fueled by the public security crisis of 2006/2007 balanced with the time needed to perform the necessary policy adjustments the new paradigm required?

Conclusions

- What are the present and future challenges for public security policies in Rio de Janeiro? What are the institutional obstacles?
- Is it possible to say that public security institutions have changed since 2006?
- What has Rio de Janeiro's government learned from the UPPs that can help solve other issues in public security?
- What can Rio's case teach the world, and Mexico?