



# Crime and plural orders in Rio de Janeiro, Brazil

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## Abstract

For the past generation scholars have written about violence, crime, and conflict in Rio de Janeiro's favelas. While this scholarship has developed an extensive understanding of the problem of violence and criminal control of the city's favelas it has not yet effectively engaged in a discussion of the implications of differential types of crime creating local security orders. Building on research in two different city regions in Rio de Janeiro, this article examines how different types of crime groups emerge from varied forms of social disorganization and contribute to particular models of social control and order. The article examines the varying relationships and exchanges built by drug gangs in Rio de Janeiro's *Zona Norte* (Northern Zone) and *milícias* in the city's *Zona Oeste* (Western Zone). The actions of these criminal organizations emerge from and promote orders that affect the lived political, social, and economic experiences of residents of favelas.

## Keywords

Brazil, crime, favelas, order, politics, Rio de Janeiro, social disorganization, violence

On Monday 29th November 2010 the cover of *O Dia*, Rio de Janeiro's largest circulation newspaper, carried a picture of the Brazilian flag flying over the favelas of the Complexo do Alemão the day after a military incursion forced gang members to flee. Below the

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picture a bold headline read ‘A Reconquista’ [The Reconquest] (Barros, 2014). This statement echoed a public note released by Governor Sérgio Cabral stating: ‘The reconquest of the territory of Complexo do Alemão by the State is a fundamental and decisive step in the public security policy that we are designing for Rio de Janeiro’ [author’s translation] (Redação Terra, 2010).

This choice of metaphor forms part of a long-standing rhetorical tradition that describes Rio de Janeiro’s shantytowns as regions that have fallen out of government control and into the hands of powerful criminal organizations. Within this logic, the metaphor makes perfect sense: Rio’s gangs are barbarian and incommensurable others the government must expel from the city to restore national order. A closer look at life in Rio’s favelas, however, reveals that the ‘reconquest’ metaphor fails to accurately portray urban conditions. While most of Rio’s favelas have had a strong gang presence over the past 30 years, powerful actors within Rio’s political system have long abetted this activity. Meanwhile, the rhetoric of unsafe favelas ruled by homicidal gangs allows officials to avoid implementing policies that would provide protection to residents of neighborhoods where these gangs operate.

Beyond whitewashing the role of the state in producing a status quo of pervasive impunity, the language of reconquest also obfuscates the extreme variation in governance arrangements by criminal organizations across this city of 6 million, approximately 23% of whom live in favelas (Cavallieri and Vial, 2012). The particular socio-political constellations that have emerged between gangs, police, and politicians through the social, political, and moral calculus of the illicit drug trade have produced disparate orders across Rio’s urban terrain. This article examines these systems of control exercised by drug gangs in the *Zona Norte* (North Zone) and police-linked extortion rackets known as *milícias* in the *Zona Oeste* (West Zone), the municipality’s two largest regions accounting for over three-quarters of Rio’s inhabitants. While the *Zona Sul* (South Zone) certainly merits attention, space constraints prevent a full consideration here.

The concept of plural orders that sits at the heart of this special section reflects the ways political and social institutions that may operate in a general way at the national or even municipal level are instantiated and reinterpreted by armed dynamics at the local, sub-local, and neighborhood level. Building on theories of social disorganization and the neighborhood ecology of crime, this article shows how systems of organized crime both emerge from and produce particular localized conditions of social disorganization and how these groups then encourage particular patterns of collective efficacy.

## Rio de Janeiro, Brazil, and the production of crime

The democratic regime established in Brazil in 1985 has faced challenges in extending basic rights and protections to the poor and working class. A well-documented history of police abuses primarily against impoverished young men is one major factor in this inequality and has contributed to Brazil suffering a world leading 53,000 homicides in 2013 (Caldeira and Holston, 1999; UNODC, 2013).

Despite these national-level conditions, the experience of bloodshed across Brazil is quite varied. For example, São Paulo has seen dramatic declines in violence that some scholars partially attribute to the control exercised by the *Primeiro Comando do Capital*,

a prison gang (Biondi, 2014; Denyer Willis, 2015: 8, 43, 64). Belo Horizonte, meanwhile, has seen significant increases in homicides over the past decade as smaller gangs contend for control of a strong consumer drugs trade. Similarly, violence in Recife is rooted in particular historical experiences and how post-authoritarian political structures exercise social control of a highly unequal society (Wolfe, 2015).

Rio de Janeiro, Brazil's second largest city, offers an important vantage from which to understand the processes that yield varied criminal violence. Arrayed across 485 square miles, the city contains diverse terrains. To the south of the historic downtown is the seaside *Zona Sul* which encompasses dozens of densely populated hillside favelas overlooking some of the country's wealthiest neighborhoods. The *Zona Norte*, extending north of downtown, is home to hundreds of favelas located on the region's hills, flatlands, and swamps. Finally, over the past 40 years, favelas have multiplied on the sprawling lowlands of the *Zona Oeste*. Many of these less densely populated favelas are nearly indistinguishable from surrounding neighborhoods and residents here endure hours-long commutes to the city's commercial districts.

Crime in each city region follows its own pattern. Understanding its various manifestations requires us to delve into these region's complex illicit relationships.

## The social origins of plural orders

While the press tends to view Latin America's criminal organizations as a threat to state power, scholars provide a more nuanced account of urban security. Where political scientists have portrayed criminal violence working within and through state power to create complex local conflict dynamics (Lessing, 2015; Snyder and Duran-Martinez, 2009), sociologists offer an alternative community-grounded approach to urban violence. This approach, which emerges from the North American experience, shows that neighborhood-level social disorganization, such as poverty, broken homes, and residential mobility, hinders the collective efficacy, or the ability of communities to control crime through informal mechanisms and, thus, correlates with higher levels of crime (Sampson, 2012; Sampson et al., 1997).

In recent years, Latin Americanists have tested this approach. Villareal and Silva (2006), examining Belo Horizonte, confirmed that social disorganization correlates strongly with crime. Their work, however, unexpectedly showed that the same poor neighborhoods with elevated levels of crime also have stronger social ties as a result of the need of these communities to advocate for improvements and to resolve infrastructural problems. Nuñez et al. (2012), in their aggregate analysis of social disorganization in Santiago, Chile, obtain results that confirm the social disorganization hypothesis though they find signs of physical disorder do not correlate with fear of crime. Escobar's (2012) analysis of social disorganization in Bogotá, Colombia, similarly confirms North American observations. At the same time, her study finds a negative correlation between residential mobility and homicide rates pointing to the persistence of habitation in violent locales where homes have limited liquidity in an informal market. Escobar's work also points to a negative, though statistically insignificant, correlation of territorial organized crime groups with homicide rates, suggesting these groups may play a role in controlling violence as well as producing it. Finally, Oliveira and Rodrigues in a

cross-city comparison of social disorganization in Brazil show that, in terms of certain crimes, favelas, with their particular settlement history and associative patterns, are associated with lower levels of victimization than wealthier communities (De Oliveira and Rodrigues, 2013).

While these studies develop useful comparisons across localities within cities, they face real challenges generating insights about the role of organized crime in these contexts. Escobar's observations regarding armed groups' crime control efforts are one of the rare occasions in which social ecology scholars have ventured into these issues. Sampson's limited discussion of this topic relies on secondary data drawing on a few ethnographies of high-crime areas in Chicago. Similarly, Villareal and Silva (2006), in their excellent work on collective efficacy in Belo Horizonte, draw only briefly on nuanced local analyses of collective life in favelas to develop their argument about how high levels of associative life are correlated with violent crime. More troublingly, an article on social disorganization in Medellin, Colombia, from 2003 to 2008 offers little mention of the paramilitary peace process and its effects on the precise neighborhoods where the study took place (Cerdá et al., 2012).

These writings point to the fact that organized criminal activity has often been overlooked in the broader literature on the social ecology of crime. First, organized criminal activity is clandestine and not easily measurable in quantitative data. Moreover, single case studies do not capture the variability of organized criminal structures and, hence, their shifting effect on collective efficacy. As we show in the coming sections, armed groups emerge, in part, from particular conditions of urban disorder and infrastructural limitations. Once they gather sufficient means of violence and financial resources, however, these groups often build partial systems of social control that address their broader organizational and economic need. Understanding the implications of organized crime for social ecology necessitates a more nuanced methodology that accounts for within-city variation in explaining how organized crime groups control, and fail to control, criminal activities in the particular local conditions they operate in.

## Crime and social control in Rio de Janeiro

Rio de Janeiro offers an important locale to analyze the roles criminal groups play in social control. With its history of violence, the Rio de Janeiro metropolitan area has a variety of localized security orders led by different types of gangs and security rackets. Within the city, drug gangs or *milícias*, police-connected extortion rackets, control most of the city's more than 1000 favelas. These organizations promote different localized political orders that impact both social control and social disorganization.

Since the emergence of favelas in the late 19th century, Rio's poor have had mostly contentious relations with security forces (Holloway, 1993). As a result, Rio's favelas have long maintained autonomous security systems. Before the 1980s, this often involved efforts by respected residents, strongmen, fledgling criminals, or local institutions intervening in resident disputes and conflicts (Fischer, 2008; Santos, 1977). Beginning in the 1980s, however, drug gangs took over most favelas and began to manage neighborly disagreements and suppress conflict. Shortly thereafter, in some favelas, *milícias* emerged to compete with drug gangs and carry out many of these same activities.

Rio's drug gangs are connected to one of three rival prison 'factions.' Because of these affiliations, many gangs have engaged in more than two decades of turf wars over the local drug trade (Dowdney, 2003; Gay, 2015). This territorial competition has produced extraordinary levels of conflict. However, local security conditions vary, with some favelas experiencing more regular conflict than others.

All drug gangs leverage their territorial control to generate income from drug sales. These illicit micro-economies structure the gangs' resources. Organizations with greater resources can expand and defend their turf as well as more effectively collaborate with police. Through local Residents Associations (*Associações de Moradores*, AMs), gangs develop and maintain contacts with the state leading to new income streams and protection (Arias, 2006). These groups may also intervene in the local economy, financing businesses and, on occasion, resorting to extortion.

For its part, the *Polícia Militar*, a uniformed civilian police force charged with ostensive policing, has a long history of illicit connections to criminal groups (see Misse, 2007) and gives regional commanders significant leeway in dealing with gangs (Albernaz et al., 2007). Depending on the city region, police may more freely use violence, abuse populations, take bribes, or directly collaborate with criminal organizations. These localized practices can generate insecurity or, if a stable police–crime relationship exists, augment order by ensuring gang authority.

In Rio, police and other public security personnel have formed death squads and supported vigilante groups for many years. In the 1980s, police began competing with gangs for territory and, over the ensuing decades, eventually established control over hundreds of favelas and working-class neighborhoods (Zaluar and Conceição, 2007). These groups, often referred to as *milícias*, dominate the politics, informal economies, and illicit activities of these neighborhoods.

*Milícia*-controlled favelas have very different systems of order. Although they generally refrain from direct involvement in the drug trade, *milícias* rely on territorial control to run protection rackets, monopolize markets in gas, cable television, and informal transportation, and speculate on real estate. *Milícias* govern space primarily to leverage value from the local economy rather than from the sale of drugs. Residents in these communities have little recourse against predation and the *milícias* maintain intense control over neighborhood associative life. Nevertheless, since *milícias* rarely engage in violent confrontation with police or other criminal groups, public violence is much lower than in gang-controlled areas (Arias, 2013).

These conditions point to how organized armed groups generate different types of crime and influence social control. Drug gangs, with their primary focus on narcotics sales, produce a social order based on three characteristics. First, amidst a global prohibition on the illicit sale of narcotics, they maintain a contentious relationship with police that involves both clandestine bribes and public confrontations. Second, because their primary revenue source is selling drugs, they strongly sanction activities that interfere with the drug trade. Third, in compensation for the violence and restrictions brought on by these activities, gangs maintain their legitimacy among local populations through the limited distribution of welfare, conflict resolution, and by controlling other types of petty and violent crime. Drug gangs also typically allow the existence of largely independent civic groups over which they occasionally exercise semi-clandestine control.

*Milícias*, on the other hand, seek to generate different kinds of social order. First, many *militicianos* are police and these organizations maintain strong relationships to law enforcement leading to few public gunfights. Second, *milícias* earn money not by dealing drugs but, rather, through extortion rackets in which residents pay the *milícia* to obtain security. Third, *milícias* are often highly concerned about their relationship with the state in terms of how it defines their connections to the police and their ability to obtain government contracts. As a result, they tend to maintain tight control over local civic groups. *Milícias* generate legitimacy through their ability to deliver security and control government contracts that enable them to reinvest in the areas they control. The outcomes of these dynamics are publicly peaceful communities characterized by semi-clandestine threats against opponents.

As the previous discussion makes clear, drug gangs and *milícias* promote markedly different social organization, violence, and engagement with state institutions that emerge from and generate different types of social disorganization and neighborhood collective efficacy. An empirical examination will shed light on how differentiated organized criminal activity affects both violence and the control of violence. The research discussed below draws primarily on secondary sources and to a lesser extent from the independent fieldwork conducted by the two authors. Extended periods of field research took place in a variety of favelas throughout the city and was primarily comprised of qualitative interviews and ethnography.<sup>1</sup>

## Crime in the Zona Norte

Beginning in the early 20th century, urban migration led to an exponential increase in favelas. By 1960 there were 380 favelas in Rio, with many located in the industrial *Zona Norte* (O’Hare and Barke, 2002). In this region, rail lines and major roads connected the city center to the periphery. Factories and warehouses quickly sprang up, providing relatively stable and well-paying jobs for countless rural migrants. In addition, across occupational sectors and social classes many engaged in land invasions and squatting to get a piece of Rio’s growing real estate market (Fischer, 2008: 223–224). The lands these groups invaded were no longer exclusively located on steep hillsides like the first favelas; they were defunct estates, unused churches, factories, state property, and even reclaimed swamps.

The diversity of these contexts and the quantity of favelas in the *Zona Norte* created a different set of dynamics than other city regions. Today, the region contains roughly 38% of Rio de Janeiro’s population and 45% of the city’s favela population (Cavallieri and Vial, 2012: 8). Moreover, most favelas in the *Zona Norte* are in close proximity to numerous other favelas. The region includes most major favela complexes such as Alemão, Maré, Lins, Caju, and Acarí among others. These conglomerations can contain more than a dozen separate favelas and upwards of 140,000 residents.

The favelas of the *Zona Norte* are decidedly urban environments. Homes that were little more than wooden shacks several decades ago today have several storeys. *Zona Norte* favelas are also surrounded by an aging infrastructure and, at first glance, can appear similar to the surrounding working-class neighborhoods. While the disparity between *Zona Norte* favelas and surrounding neighborhoods may not be obvious, their

differences are manifest. The informal status of favelas has contributed to significant underdevelopment leading to precarious infrastructure and social services.

According to the 2000 Census, the *Zona Norte*'s major favela complexes had the lowest levels of development of any Rio neighborhoods (IBGE, 2010). Formal unemployment can be extremely high and forces residents into illicit and informal markets. This differs markedly from *Zona Sul* favelas where unemployment is generally low. In a 2010 survey of several *Zona Sul* favelas, their unemployment rates were at or below the 7.9% national average (IETS, 2010). With their proximity to wealthy neighborhoods, many residents find jobs in the service industry or in the homes of the wealthy. The *Zona Norte*'s distance from these markets has had significant impacts on the political economy of criminality and organized crime.

### *Social disorganization and politics in the Zona Norte*

The sheer quantity and proximity of favelas in the *Zona Norte* and the highly constrained economic conditions facing inhabitants have long structured organized crime here. By the 1960s, most favelas had some form of organized crime through petty drug trafficking, the *jogo do bicho* (numbers game), or groups of loosely organized thieves (Misse, 1999: 313–315, 341). In addition, due to an increasingly repressive public security apparatus, 'many poor communities began to effectively remove themselves from police jurisdiction for all but the most serious of crimes' (Fischer, 2008: 206).

Rio's powerful prison gangs emerged from this context. *Comando Vermelho*, the first and most powerful faction, began dominating favelas in the early 1980s. The *Zona Norte*'s favelas offered *Comando Vermelho* members ample autonomy and anonymity due to their size and local distrust of police. With increasing access to Andean cocaine, *Comando Vermelho* and their main rival, *Terceiro Comando*, acquired arms that they used to extend control over illicit activities (Gay, 2015).<sup>2</sup> Several of the *Zona Norte* favela complexes became primary bases for these organizations' leaders and provided profitable territories for drug distribution and sale.

Growing inter-faction competition increased violence in the 1990s and 2000s. While not every *Zona Norte* favela was in a constant state of conflict, the region has been, by far, the most violent area of the city over the last two decades (Human Rights Watch, 2009: 120). The *Policia Militar*, for their part, responded with further repression. By the mid-2000s, they were killing civilians at an unprecedented rate. In 2007 alone, Rio's police murdered an estimated 1330 citizens (Human Rights Watch, 2009: 30). This police violence has seldom threatened gang domination of favelas, however, as it only pushes favela residents into deeper alignment with gangs.

This scenario contrasts with the *Zona Oeste*, where corrupt police have taken over many favelas, expelling gang members and their families. This phenomenon is rare in the *Zona Norte*. The size of these communities and their gang organizations makes territorial takeover by small groups of corrupt police nearly impossible. There are cases where this has occurred (Batan, Praia de Ramos, Roquete Pinto, Caixa d'Agua, Fubá, and Campinho) but these communities are generally smaller and isolated from larger complexes.<sup>3</sup>

Politicians and political parties have benefited from gang control of the *Zona Norte* favelas. In many cases, candidates form short-term clientelist arrangements with gangs

through the AMs to allow them access during electoral campaigns (see Arias, 2006), peppering the walls of favelas with their political propaganda. This phenomenon is especially prominent in the largest complexes where dozens of political parties and candidates simultaneously maintain agreements with gangs and multiple AMs, which produces little political accountability and undermines the integration of these communities into the urban grid.<sup>4</sup>

The *Zona Norte* is not the only city region where gangs have thrived but several of the geographic and demographic variables have intensified the gangs' authority. For one, the largest favelas are virtual cities within cities. They encompass substantial territories and populations in which police have historically had a negligible presence and social services are, often, extremely limited. Gangs can also employ hundreds of young men and bring in millions of Brazilian *Reais* each month that support local businesses (Cunha, 2013). With significant internal narcotics demand, some gangs establish dozens of *bocas de fumo* (points of sale), extending their control of space and embedding themselves more completely into these communities' social fabric. In addition, due to fewer educational and employment opportunities, *Zona Norte* gangs have huge numbers of poorly educated and disenfranchised young men and boys to recruit from. These dynamics have led to particular strategies of armed social control.

### **Social control and organized crime in the *Zona Norte***

Gangs maintain an informal social contract with favela residents. Although most gangs have quasi-dictatorial powers over some aspects of favela life, gang activities generally require a modicum of legitimacy and at least tacit community consent. Therefore, gangs engage in a variety of activities to cultivate local support. The exact mixture of these activities and the nature of the local social contract determine the form of moral authority the gang exercises.

First, gangs have imposed types of order that are both coercive and cooperative. On the one hand, it is normal for drug gangs to ostentatiously display firearms in public as a constant reminder of their power. Their propensity to publicly and violently punish residents who violate rules or infringe on the drug trade also sends the message that disloyalty comes at a high price. Especially in the *Zona Norte*'s more violent areas, gangs may feel the need to implement a harsh form of order in their attempt to control territory against a repressive police force and rival factions. Moreover, given the region's high rate of conflict, there are many cases where territory changes hands. In other city regions, where turnover is less frequent, a more stable and long-lasting order may endure in which the gang does not feel the need to assert its dominance to the same degree.

For instance, in Complexo da Maré, a contiguous group of 15 favelas situated along Guanabara Bay, all three factions have controlled territory and engaged in frequent invasion attempts over the years. Such high levels of threat and inter-gang violence in several of these communities have led gangs to maintain a near-constant heavily-armed presence on the streets, closely monitor entry and exit to these communities, and often resort to a more coercive approach to controlling local crime.

Gang rule also has a more benign component in which these groups impose order by preventing disturbances (breaking up fights, arbitrating disputes, etc.) and punishing

criminals (rapists, domestic abusers, thieves, etc.). Although the specific rules that exist in each favela vary, the list of proscribed activities generally includes (Dowdney, 2003: 64):

- No theft in the community
- No physical fighting between residents
- No rape of women
- No sexual abuse of children
- No wife beating.

This maintenance of public order is a significant benefit and residents generally express little fear of theft or abuse at the hands of neighbors and family members. While some have argued that these rules are arbitrarily enforced (Arias and Rodrigues, 2006; Larkins, 2015; Penglase, 2014), gangs are often extremely effective in preventing violence and crime within these communities. During extended fieldwork in Complexo da Maré, dozens of interviewed gang members revealed that they are frequently engaged in such forms of dispute resolution and are often required to ensure public order. For their part, residents disclosed their reliance on these mechanisms, though many also shared reservations in doing so (see also Larkins, 2015: 186–187).

Gangs also gain legitimacy by stimulating the local economy. Many community members participate in the drug trade and receive compensation. In most cases, the salary is not large but grows gradually as the gang member ascends the criminal hierarchy (Souza e Silva, 2006). The families, girlfriends, relatives, and acquaintances of gang members also rely on money earned by gang members (Gay, 2005). Gangs have also been known to provide more concerted forms of welfare, which can include paying for transportation to hospitals for sick residents, for food, refrigerators, gas cylinders, medicine, and other necessary items (compiled from Dowdney, 2003; Leeds, 1996; and field notes).

Gangs also offer entertainment for the population by financing holiday parties at which they provide free food and drink and sometimes presents for children and attendees. They also host weekly *baile funk* dance parties in which music with a heavy bass track is combined, at times, with lyrics that glorify the gang faction. Through these practices, local populations, especially youth, identify strongly with the local gang, providing another source of criminal legitimacy.

## **Crime in the Zona Oeste**

Located on sprawling lowland plains, the *Zona Oeste* is characterized by a more suburban infrastructure. Whereas the *Zona Norte* grew along a dense road and railroad network, the *Zona Oeste* long had a sparse population and transit network. This region, however, is immensely diverse. The *Zona Oeste* faces significant poverty especially in areas further away from the city center (Cavallieri and Lopes, 2008). Closer to the urban core, in places like Jacarépagua, middle-class populations coexist with large groups of favelas. Finally, the upscale oceanfront neighborhoods concentrate substantial wealth.

In the mid-20th century the *Zona Oeste* was known as the city's *Sertão* (Backlands), after the arid, impoverished northeastern interior, because of the gunmen and land conflicts that made this region all too much like the wild west in the eyes of Rio's elite.

Although hyperbolic, the nickname reflects the important role armed groups have long played in *Zona Oeste* landholding. For years, property owners used gunmen to claim land and charge rents (Fischer, 2008). Beginning in the 1970s, gunmen became directly involved in settling the region (Zaluar and Conceição, 2007). In Rio das Pedras, for example, these groups, in conjunction with other neighborhood leaders, expanded the community and determined who could live in the area (Burgos, 2002).

As the *Zona Oeste* grew, infrastructural deficits provided important spaces for informal services delivery. Residents faced immense challenges simply getting to work. Bus companies, confronting long and costly drives at a single fixed fare, delivered very limited service. Local entrepreneurs, especially from the 1990s onward, developed informal van cooperatives. Lacking licenses and facing police repression, these van services came under the control of police-connected extortion rackets. This helped entrench organized crime, created a stronger basis for regional growth by making transportation more accessible, and greatly enriched *milícias* (Assembléia Legislativa do Estado do Rio de Janeiro, 2009: 112–123; Cano and Duarte, 2012).

Beyond bus services, the emerging favelas of the *Zona Oeste* faced serial deficits not encountered in other parts of the city. Access to water and sewage, already limited in many favelas, was especially challenging in a region where even wealthy neighborhoods did not have regularized water and sanitation into the late 1990s. Where favelas in other regions were inserted into dense social networks associated with the church, the city's upper classes, and labor unions, the *Zona Oeste* favelas emerged largely isolated from these networks and alternative sources of influence and collective action, exposing them to more economically extensive criminal activities.

In these rapidly growing communities, *milícias* established control over key services. These groups took control of water and sanitation. They also expanded their illicit activities to control the distribution of pirated cable television services, internet access, and electricity (Arias, 2013). In some cases, they monopolized portions of the local economy and then charged rents on services such as the distribution of cooking gas cylinders (Zaluar and Conceição, 2007: 91). The *Zona Oeste*'s *milícias*, in the end, are protection rackets that charge businesses to operate.

While many *Zona Oeste* neighborhoods are *milícia* controlled, drug gangs dominate some favelas. Perhaps the most important among these is Cidade de Deus, a large neighborhood composed of various housing projects and adjoining shantytowns. Gang dominance here derives directly from its particular history as a set of housing projects built in the 1970s to resettle favela residents from the *Zona Sul* and *Zona Norte* who brought with them their ties to the gang underworld. In addition, despite the area's limited infrastructure, it had greater city services than the autonomously built shantytowns in the region. As a result, Cidade de Deus always had a more stable landholding system and the *milícias*, so characteristic of other parts of the *Zona Oeste*, had only limited penetration.

### *Social disorganization and politics in the Zona Oeste*

Over the past 15 years, *Zona Oeste* criminal organizations have played an important role in Rio politics. The dominant *milícias* operating in the region have greater access to

political and cultural capital than the *Zona Norte*'s drug-trafficking gangs. At a superficial level, many high-ranking *militicianos*, often police, have completed high school. Through years of government service, they have gained access to high-level bureaucrats and politicians, know how to speak their dialect, and understand the usefulness of information and networks in brokering contracts.

In the mid- to late 2000s, members of these organizations elected several members to the city council and state legislature. Of particular note, these groups not only elected members to office in the open-list proportional representation system used in Brazil but they were often elected as members of leading political parties including the PT (Worker's Party), the PMDB (Brazilian Democratic Movement Party), and the DEM (Democrats), parties connected, respectively, to the president of Brazil, Rio's governor, and the city's mayor (Cano and Duarte, 2012). Since 2010, following the Comissão Parlamentar de Inquerito (2008) and subsequent investigations, *milícias* have been more discreet, often not directly running for office to avoid scrutiny. Nonetheless, they have continued to develop contacts with powerful politicians and a host of political parties (Cano and Duarte, 2012: 108–110). While this has meant fewer *militicianos* holding office, it has enabled them to retain a great deal of political power despite their more precarious position.

These relationships aid in the urbanization and development of *milícia*-controlled favelas. For example, in Rio das Pedras, strong contacts with a former Rio mayor aided in building housing projects, improving roads, and building new schools in this rapidly developing neighborhood (Arias, 2013). While these improvements had benefits for residents, they also enriched *militicianos* who own much of the community's land.

### **Social control and organized crime in the Zona Oeste**

The *milícias* are committed to a particular moral exchange with area residents. This exchange is based on the idea that they provide a superior and more ethical form of security than the one offered by drug dealers. At the highest levels of Rio's government, officials, including the former mayor and current Secretary for Public Safety, have identified *milícias* as 'a lesser evil,' seeing them as a strong counterweight to drug gangs (Lima, 2008). Some residents critique *milícia* violence but many praise these organizations for providing peace and security that would otherwise not be available (Arias, 2013).

Zaluar and Conceição note that *milícias* behave differently from one another. Some adopt aggressive postures where others adopt more discreet security delivery strategies. These differences aside, *milícias* generally seek, at least in their own self-representation, to repress the drug trade in the communities they control. A survey of favela residents revealed that only 18.5% of residents of *milícia*-controlled favelas reported seeing public drug consumption as opposed to 52% in drug gang dominated areas. Similarly, in *milícia*-controlled favelas, just 26.6% of interviewees reported muggings in their neighborhood as opposed to 47% in gang-controlled areas. Finally, just 15% of residents in *milícia*-controlled areas reported hearing gunfire frequently as opposed to 62% in gang areas (Zaluar and Conceição, 2007: 96–97).

On the whole, the evidence presented here reflects a very specific moral order based on the rejection of the drug trade and its criminal practices in return for the acceptance of a different type of order. *Milícias* promote an overall pattern of personal security in the

areas they dominate. Nonetheless, residents must accept their near total power over political and economic life. This system of social control is also bound up with the effective administration of communities by the *milícia* which yields improved services. The general effect is to create conditions of relative peace in which residents can walk around their communities with confidence that gunfire will not break out. Drug dealers do not operate in the streets and residents do not have to worry about their children being drawn into drug consumption. At the same time, this apparent peace is balanced with the real fear residents have of losing their homes or expressing political or social opinions publicly.

## UPPs, social disorganization, and collective efficacy

No Brazilian public safety policy has received more international attention than the *Unidades de Polícia Pacificadora* (Police Pacifying Units, UPPs) in which groups of specially trained recruits engage in proximity policing of gang-controlled favelas. This article began with a discussion of the ‘pacification’ of the Complexo do Alemão in 2010, which forced gangs out of a key center of their operations and dramatically expanded the scope of UPP operations in the city.

While the international press originally hailed the UPPs as a dramatic step forward in public safety ahead of the 2016 Summer Olympics in Rio, increasing evidence suggests that the UPPs have had ambivalent outcomes in many of the communities where they were implemented (Vilarouca and Ribeiro, 2014). An examination of some of the emerging literature on these units points not just to the material accomplishments and limitations of this policy but also to the underlying ways that these programs have become enmeshed in broader processes of social disorganization and collective efficacy in Rio.

On the whole, the UPPs have accomplished their targeted mission of reducing public violence and homicides. With one exception, all the UPP programs are located in areas controlled by drug gangs that suffered high levels of public violence and out in the open drug dealing. Several studies have shown that the implementation of these programs led to dramatic reductions in the number of homicides and armed robberies and the almost complete elimination of murders committed by police (Cano et al., 2014). The presence of police, however, also led to marked increases in assaults, domestic violence, threats, theft, and drug crimes. Rapes increased by a factor of 3.5, the most substantial increase of any of the crimes examined. Finally, while homicides declined, disappearances increased (Cano et al., 2014).

All of this reflects a breakdown in the social control structures established by traffickers in the favelas they dominate. While the gang was often effectively suppressed, these groups lost their ability to prevent burglaries, rapes, fights, and domestic violence. While the police no doubt sought to exercise some control over these activities, their mission imperatives and social control resources proved inadequate to maintain low levels of these types of activities. For residents of these communities, such lack of social control and access to dispute resolution produces high levels of insecurity and uncertainty, undermining the pacification effort from within.

Other evidence points to the ways that separately trained UPP police have become enmeshed in existing systems of social disorganization. Over the life of the project there have been increasing accusations against police of both violence and corruption. In the

case of Complexo da Maré, numerous abuses of local youths by pacification forces led to increasingly violent confrontations in which youths threw bottles and rocks at security forces which responded with tear gas and rubber bullets. Glenny (2016) has also pointed to an elaborate and violent corruption plot in the UPP in the *Zona Sul* favela of Rocinha that led to the murder of residents and police extortion of the drug trade. The commander of the Morro de São Carlos UPP was fired for corruption (Cruz, 2015). Police in another favela negotiated a peaceful accommodation with drug traffickers there (Veja, 2011).

These are just a few of major challenges that have undermined the credibility of the UPPs, impact criminal behavior, and the willingness of residents to cooperate with police. While the program clearly has its merits it also has flaws. Central to these flaws are the ways that these programs become embedded in existing practices of corruption and abuse. This reflects both the institutional persistence of dysfunctional behavior (see Evans, 1995) as well as how these programs become part of wider systems of social disorganization in the city.

Finally, of the 38 existing UPPs, only the Batan program operates in an area formerly dominated by a *milícia*. This decision on the part of Rio de Janeiro's police leadership reflects the ineffectiveness of the UPPs in confronting the types of social disorganization that contribute to *milícia* activity, where the problem is not suppressing the confrontations associated with the drug trade but, rather, the pervasive police corruption that drives these extortion rackets. Thus, the formal social control measures associated with the UPP are uniquely ill-suited to the challenges posed by *milícias*.

## Conclusion

All too often discussions of crime and violence tend to focus on dynamics at the national and municipal level. This approach has significant limitations for understanding crime in large urban areas because, as we have shown, there is significant variation on a local level within these urban territories. In the context of the ideas of plural order developed in the introduction to this special section, the impacts of these generalizations are significant.

North American criminologists have pointed to the importance of neighborhood dynamics in understanding crime for some time. We build on these insights and a rich understanding of the dynamics and realities of city regions in Rio to show how local conditions produce different types of armed orders across the city. This article has shown how varying dynamics of social disorganization and collective efficacy of two city regions both contribute to and emerge from particular criminal activities.

Ultimately, this analysis shows the importance of understanding organized crime as both a driver and result of social and political processes. Given the localized nature of organized crime groups, we argue that drilling down to sub-local and neighborhood levels to understand the dynamics of plural orders provides insights into the nature, conditions, and trajectory of wider political and social phenomena.

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## Notes

1. Enrique Desmond Arias conducted field research in Rio de Janeiro on various occasions between 1997 and 2012. Nicholas Barnes conducted 33 months of fieldwork in Rio de Janeiro from 2012 to 2016.
2. The third gang faction, *Amigos dos Amigos*, emerged in the mid-1990s, the result of a schism within *Comando Vermelho*.
3. Although Praia de Ramos and Roquete Pinto are technically located in Complexo da Maré, they are two of the smallest favelas of the complex and are geographically separate, which was instrumental in the ability of *milícias* to dominate these communities.
4. This is especially common in Complexo da Maré, where multiple factions and a *milícia* have competed for territorial control and political favor for nearly two decades. See also *O Dia* (2014) for a discussion of these dynamics during the occupation of Maré during the 2014 elections.

## References

- Albernaz ER, Caruso H and Patrício L (2007) Tensões e desafios de um policiamento comunitário em favelas do Rio de Janeiro. *São Paulo Em Perspectiva* 21(2): 39–52.
- Arias ED (2006) *Drugs and Democracy in Rio de Janeiro: Trafficking, Social Networks, and Public Security*. Chapel Hill: University of North Carolina Press.
- Arias ED (2013) The impacts of differential armed dominance of politics in Rio de Janeiro, Brazil. *Studies in Comparative International Development* 48(3): 263–284.
- Arias ED and Rodrigues CD (2006) The myth of personal security: Criminal gangs, dispute resolution, and identity in Rio de Janeiro's favelas. *Latin American Politics and Society* 48(4): 53–81.
- Assembléia Legislativa do Estado do Rio de Janeiro (2009) *Relatório Final da Comissão Parlamentar de Inquérito Destinada a Investigar a Ação de Milícias no Âmbito do Estado do Rio de Janeiro*. Rio de Janeiro: Assembléia Legislativa do Estado do Rio de Janeiro.
- Barros JA (2014) What went wrong with the UPPs? *Rio on Watch*, 23 September. Available at: [www.rioonwatch.org/?p=17973](http://www.rioonwatch.org/?p=17973)
- Biondi K (2014) *Etnografia no movimento: Território, hierarquia, e lei no PCC*. Unpublished dissertation, Universidade Federal de São Carlos.
- Burgos MB (2002) Favela, cidade, e cidadania em Rio das Pedras. In: Burgos MB (ed.) *A Utopia da Comunidade: Rio das Pedras, Uma Favela Carioca*. Rio de Janeiro: Editora PUC/Loyola, pp. 21–90.
- Caldeira TPR and Holston J (1999) Democracy and violence in Brazil. *Comparative Studies in Society and History* 41(4): 691–729.
- Cano I and Duarte T (2012) *No Sapatinho: A Evolução das Milícias no Rio de Janeiro (2008–2011)*. Rio de Janeiro: Laboratório de Análise da Violência and Fundação Heinrich Böll.
- Cano I, Borges D and Ribeiro E (eds) (2014) *Os Donos do Morro: Uma Avaliação Exploratória do Impacto das Unidades de Polícia Pacificadora (UPPs) no Rio de Janeiro*. Rio de Janeiro: Fundação Heinrich Böll.
- Cavallieri F and Lopes GP (2008) *Índice de Desenvolvimento Social – IDS: Comparando as Realidades Microrurbanas da Cidade do Rio de Janeiro*. Rio de Janeiro: Instituto Pereira Passos.
- Cavallieri F and Vial A (2012) *Favelas na Cidade do Rio de Janeiro: O Quadro Populacional com Base no Censo 2010*. Coleção Estudos Cariocas. Rio de Janeiro: Instituto Pereira Passos.
- Cerdá M, Morenoff JD, Hansen BB et al. (2012) Reducing violence by transforming neighborhoods: A natural experiment in Medellín, Colombia. *American Journal of Epidemiology* 175(10): 1045–1053.

- Comissão Parlamentar de Inquérito (2008) *Relatório Final Da Comissão Parlamentar de Inquérito Destinada a Investigar a Ação de Milícias No Âmbito Do Estado Do Rio de Janeiro*. Rio de Janeiro: Rio de Janeiro State Legislative Assembly.
- Cruz A (2015) Ex-Comandante de UPP é demitido por corrupção. *O Dia*, 6 August. Available at: [odia.ig.com.br/noticia/rio-de-janeiro/2015-08-06/ex-comandante-de-upp-e-demitido-por-corrupcao.html](http://odia.ig.com.br/noticia/rio-de-janeiro/2015-08-06/ex-comandante-de-upp-e-demitido-por-corrupcao.html) (accessed 19 May 2016).
- Cunha V (2013) Barão da Maré fatura alto com a Cracolândia. *O Dia*, 18 December. Available at: [odia.ig.com.br/noticia/rio-de-janeiro/2013-12-18/barao-da-mare-fatura-alto-com-a-cracolandia.html](http://odia.ig.com.br/noticia/rio-de-janeiro/2013-12-18/barao-da-mare-fatura-alto-com-a-cracolandia.html) (accessed 1 November 2015).
- Denyer Willis G (2015) *The Killing Consensus: Police, Organized Crime, and the Regulation of Life and Death in Urban Brazil*. Berkeley: University of California Press.
- De Oliveira VC and Rodrigues CD (2013) Desorganización, vecindarios, y la intervención del control social. *Estudios Sociológicos* 31(93): 755–792.
- Dowdney L (2003) *Children of the Drug Trade*. Rio de Janeiro: 7 Letras.
- Escobar G (2012) Using social disorganization theory to understand the spatial distribution of homicides in Bogota, Colombia. *Revista Invi* 27(74): 21–85.
- Evans P (1995) *Embedded Autonomy: States and Industrial Transformation*. Princeton, NJ: Princeton University Press.
- Fischer B (2008) *A Poverty of Rights*. Palo Alto, CA: Stanford University Press.
- Gay R (2005) *Lucia: Testimonies of a Brazilian Drug Dealer's Woman*. Philadelphia, PA: Temple University Press.
- Gay R (2015) *Bruno: Conversations with a Brazilian Drug Dealer*. Durham, NC: Duke University Press.
- Glenny M (2016) *Nemesis: One Man and the Battle for Rio*. New York: Knopf.
- Holloway T (1993) *Policing Rio de Janeiro: Repression and Resistance in the 19th-Century City*. Palo Alto, CA: Stanford University Press.
- Human Rights Watch (2009) *Lethal Force: Police Violence and Public Security in Rio de Janeiro and São Paulo*. New York: Human Rights Watch.
- IBGE (Instituto Brasileiro de Geografia e Estatística) (2010) *Censo Demográfico*. Instituto Brasileiro de Geografia e Estatística. Available at: [www.camara.rj.gov.br/planodiretor/pd2009/saudepd/Anexo3\\_IDH.pdf](http://www.camara.rj.gov.br/planodiretor/pd2009/saudepd/Anexo3_IDH.pdf) (accessed 23 October 2015).
- IETS (Instituto de Estudos do Trabalho e Sociedade) (2010) *Pesquisa nas Favelas com Unidades de Polícia Pacificadora da Cidade do Rio de Janeiro*. Instituto de Estudos do Trabalho e Sociedade. Available at: [www.iets.org.br/projeto/pesquisa-nas-favelas-com-unidades-de-policia-pacificadora-da-cidade-do-rio-de-janeiro](http://www.iets.org.br/projeto/pesquisa-nas-favelas-com-unidades-de-policia-pacificadora-da-cidade-do-rio-de-janeiro) (accessed 23 October 2015).
- Larkins ER (2015) *The Spectacular Favela: Violence in Modern Brazil*. Berkeley: University of California Press.
- Leeds E (1996) Cocaine and parallel polities in the Brazilian urban periphery: Constraints on local level democratization. *Latin America Research Review* 31(Fall): 47–83.
- Lessing B (2015) Logics of violence in criminal war. *Journal of Conflict Resolution* 59(8): 1486–1516.
- Lima L (2008) Poder público foi ‘sócio’ das milícias no Rio, avalia presidente da CPI. *Agência Brasil*, 8 August. Available at: [memoria.ebc.com.br/agenciabrasil/noticia/2008-08-28/poder-publico-foi-%E2%80%9Csocio%E2%80%9D-das-milicias-no-rio-avalia-presidente-de-cpi](http://memoria.ebc.com.br/agenciabrasil/noticia/2008-08-28/poder-publico-foi-%E2%80%9Csocio%E2%80%9D-das-milicias-no-rio-avalia-presidente-de-cpi) (accessed 17 March 2014).
- Misse M (1999) *Malandros, marginais e vagabundos & acumulação social da violência no Rio de Janeiro*. Tese, Instituto Universitário de Pesquisas do Rio de Janeiro.
- Misse M (2007) Mercados ilegais, redes de proteção e organização local do crime no Rio de Janeiro. *Estudos Avançados* 21(61): 139–157.

- Nuñez J, Tocornal X and Henriquez P (2012) Determinantes individuales e del entorno residencial en la percepción de seguridad en barrios del Gran Santiago, Chile. *Revista Invi* 74(27): 87–120.
- O Dia (2014) Assistencialismo e associações dominam as eleições na Maré. 7 September. Available at: [odia.ig.com.br/eleicoes2014/2014-09-07/assistencialismo-e-associacoes-dominam-as-eleicoes-na-mare.html](http://odia.ig.com.br/eleicoes2014/2014-09-07/assistencialismo-e-associacoes-dominam-as-eleicoes-na-mare.html) (accessed 11 September 2014).
- O'Hare G and Barke M (2002) The favelas of Rio de Janeiro: A temporal and spatial analysis. *GeoJournal* 56(3): 225–240.
- Penglase RB (2014) *Living with Insecurity in a Brazilian Favela: Urban Violence and Daily Life*. New Brunswick, NJ: Rutgers University Press.
- Redação Terra (2010) Em nota, Cabral comemora a ‘reconquista’ do Complexo do Alemão. *Terra*, 28 November. Available at: [videaeestilo.terra.com.br/interna/0,,OI4815944-EI12822,00.html](http://videaeestilo.terra.com.br/interna/0,,OI4815944-EI12822,00.html) (accessed 23 October 2015).
- Sampson R (2012) *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press.
- Sampson R, Raudenbusch S and Earls F (1997) Neighborhoods and violence crime: A multilevel study of collective efficacy. *Science* 277: 918–924.
- Santos B de S (1977) The law of the oppressed: The construction and reproduction of legality in Pasargada. *Law and Society Review* 12(1): 5–126.
- Snyder R and Duran-Martinez A (2009) Does illegality breed violence? Drug trafficking and state-sponsored protection rackets. *Crime, Law and Social Change* 52(3): 253–273.
- Souza e Silva J de (ed.) (2006) *Caminhada de Crianças, Adolescentes e Jovens na Rede do Tráfico de Drogas no Varejo do Rio de Janeiro, 2004–2006: Sumário Executivo*. Rio de Janeiro: Observatório de Favelas.
- UNODC (2013) Global study on homicide. Available at: [data.unodc.org/#state:0](http://data.unodc.org/#state:0) (accessed 23 October 2015).
- Veja (2011) O escândalo da UPP: População do Rio descobre a diferença entre pacificação e paz negociada com bandidos. 14 September. Available at: [veja.abril.com.br/noticia/brasil/o-escandalo-da-upp-populacao-do-rio-descobre-a-diferenca-entre-a-pacificacao-e-a-paz-negoiciada-com-bandidos](http://veja.abril.com.br/noticia/brasil/o-escandalo-da-upp-populacao-do-rio-descobre-a-diferenca-entre-a-pacificacao-e-a-paz-negoiciada-com-bandidos) (accessed 19 May 2016).
- Vilarouca MG and Ribeiro L (2014) Descontinando as práticas de pacificação: Resultados de um survey com residentes em dez UPPs. Rio de Janeiro: CPDOC/FGV, UFRJ e Université Paris Est Marne la Valée, 3 e 4 de novembro de 2014.
- Villareal A and Silva BFA (2006) Social cohesion, criminal victimization, and perceived risk of crime in Brazilian neighborhoods. *Social Forces* 84(3): 1725–1753.
- Wolfe MJ (2015) Building criminal authority: A comparative analysis of drug gangs in Rio de Janeiro and Recife. *Latin American Politics and Society* 52(2): 21–40.
- Zaluar A and Conceição IS (2007) Favelas sob o controle das Milícias no Rio de Janeiro. *São Paulo em Perspectiva* 21(2): 89–101.

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## Résumé

Au cours de la dernière génération, les chercheurs se sont penchés sur la violence, le crime et les conflits dans les favelas de Rio de Janeiro. Ces travaux de recherche ont permis de dégager une meilleure compréhension du problème de la violence et du contrôle criminel des favelas de la ville, mais ils n'ont pas abordé la question des implications de l'hétérogénéité des comportements criminels dans l'établissement d'un ordre sécuritaire au niveau local. À partir d'un travail de recherche conduit dans deux aires métropolitaines de la ville Rio de Janeiro, cet article montre comment les différentes catégories de criminels exploitent les formes de désorganisation sociale et contribuent à l'établissement de modèles spécifiques de contrôle et d'imposition de l'ordre social. Il analyse les relations changeantes et les échanges entre les gangs de trafiquants de drogue de la zone nord (Zona Norte) et les milices de la zone ouest (Zona Oeste) de Rio de Janeiro. Ces groupes criminels émergent et font la promotion de formes d'organisation sociale qui affectent les pratiques politiques, sociales et économiques des résidents des favelas.

## Mots-clés

Crime, Brésil, violence, politiques, désorganisation sociale, ordre, Rio de Janeiro, favelas

## Resumen

Generaciones anteriores de académicos han escrito acerca de la violencia, el crimen y el conflicto en las favelas de Río de Janeiro. Si bien estas investigaciones han desarrollado una amplia comprensión del problema de la violencia criminal y del control de las favelas de la ciudad, no se ha comprometido efectivamente todavía en un debate sobre las implicaciones de tipos diferenciados de los delitos que crean órdenes de seguridad locales. Sobre la base de una investigación en dos regiones diferentes de la ciudad de Río de Janeiro, este trabajo examina cómo los diferentes tipos de grupos del crimen emergen de variadas formas de desorganización social y contribuyen a modelos

particulares de control social y de orden. Este artículo examina las diversas relaciones e intercambios construidos por bandas de narcotraficantes en la Zona Norte de Río de Janeiro, y los grupos paramilitares en la Zona Oeste de la ciudad. Las acciones de estas organizaciones criminales emergen de y promueven los órdenes que afectan a las experiencias políticas, sociales y económicas vividas por los habitantes de las favelas.

**Palabras clave**

Crimen, Brasil, Violencia, Política, desorganización social, Orden, Río de Janeiro, Favelas