



E-ISSN 2332-886X

Available online at

<https://scholasticahq.com/criminology-criminal-justice-law-society/>

Guns for Hire: North America's Intra-continental Gun Trafficking Networks

Christian Leuprecht^a and Andrew Aulthouse^b

^a *Royal Military College of Canada*

^b *Queens University*

ABSTRACT AND ARTICLE INFORMATION

Since Canada adjoins the largest weapons market in the world, it is unsurprising that guns used to commit criminal acts in Canada largely originate in the United States. But how are such weapons transported across the border: by individual entrepreneurs, by small networks, or by sophisticated cartels? This article analyzes six cases that resulted in prosecutions of 40 Canadian and American citizens implicated in Canada–U.S. gun trafficking networks between 2007 and 2010. This study is a plausibility probe that applies social network analysis—investigating networks that come into existence by the creation of pairwise links among their members—to analyze global structures, identify brokers and their roles, and discover patterns in the way guns are being procured in the United States, transported across the border, and distributed in Canada. In the process, this study generates hypotheses about network structure and works towards modeling these networks functionally: Since guns are available legally in the United States, we expect to find a proliferation of relatively simple networks. In contrast, drugs, which are not as readily available, might require more sophisticated networks to be trafficked across the border. Results revealed that the trafficking network structures seem to be driven by function. When the objective of the network is mere rent-seeking, transborder trafficking networks for guns tend to be simple. By contrast, when the objective is to manage violence as a constituent element of a larger criminal organization and its activities, networks tend to be more sophisticated, although the gun trafficking networks remain simpler.

Article History:

Received 26 April 2014

Received in revised form 9 Sept 2014

Accepted 17 Sept 2014

Keywords:

plausibility probe, social network analysis, gun trafficking

© 2014 *Criminology, Criminal Justice, Law & Society* and The Western Society of Criminology

Hosting by Scholastica. All rights reserved.

In November of 2008, a family in Guelph had their car and house shot at by a neighbor while he was high on cocaine. A month later, a 26-year-old Ottawa man was shot dead answering his door. The following month, three people were held at gunpoint during a robbery in Vaughan (Powell, 2009). These violent crimes share a common denominator: each

was committed with a gun traced back to Ugur Yildiz, a Chicago man who ferried over 200 firearms into Canada (Thompson, 2009). Two-thirds of all guns used in Canadian crimes originate in the United States (Cook, Cukier, & Krause, 2009). Indictments for gun trafficking and the number of guns seized per investigation has trended upward (RCMP, 2007). In

2011, the number of guns seized by the Canada Border Services Agency had doubled (to 673) from the number seized in 2006. Also in 2011, Canadian police seized a total of 33,727 guns nationwide (McKie, 2013). Statistically, the majority of these guns must have originated in the United States.

This article is a plausibility probe—a preliminary study on relatively untested theories and hypotheses to determine whether more intensive and laborious testing is warranted (George & Bennett, 2005)—that applies social network analysis (SNA) to understand structures, identify brokers, and discover patterns in the way guns are being procured, transported across the border, and distributed. Instead of falsifying a proposed theory, the objective is to refine the theoretical dynamics and conceptual framework and to formulate hypotheses. Two properties of the transported objects are key: first, the ease of acquisition; and second, the profit margin per object transported. Since guns, in contrast to drugs, are available legally in the United States, we expect that the acquisition segment of networks will be simpler for gun transport networks. Profit per gun is substantial; in contrast, while the profit for a single drug shipment may be substantial, it must be broken up into smaller units for sale. This suggests that the Canadian component of cross-border transport networks will differ as brokers play different roles. The ready supply of guns in the United States means that trafficking can be easily accomplished, as it only requires individuals willing to cross the border to ferry guns into Canada. We, therefore, expect that there may be a number of single actors who are smuggling guns. However, if this is being done on a larger scale, then the critical factor is the need to find a market for the smuggled guns. This suggests a hub network with a broker on the Canadian side directing a set of mules that actually cross the border. There is no need for network structure on the American side since purchases can be made legally in several jurisdictions. The vulnerability in such a network is the broker. Therefore, we might expect that cut-outs could be used to separate the mules from the broker so that detection at the border would not lead immediately to the broker and disrupt the entire network.

Although gun trafficking has become a prominent issue, it has received little academic attention. This is primarily due to data limitations and the unsophisticated nature of the trafficking networks. Canada-wide, the homicide rate has plateaued or declined in recent years. In 2010, Statistics Canada recorded the lowest homicide rate since 1966. Between 2007 and 2010, the rate of handgun-associated homicide declined by 23% (Mahoney, 2011). Toronto registered 1.59 homicide

deaths per 100,000 people in 2011 (Vandaele, 2011), much lower than comparably sized American cities, such as Houston (17.2 per 100,000; Gazdic, 2007). Gun violence has been on the rise, nonetheless (Cook et al., 2009). The proliferation of Canadian street gangs has been accompanied by an increase of 500% in gang-related homicides between 1991 and 2008, as these gangs have been emboldened by guns (Linden, 2010). The Criminal Intelligence Service Canada noted that guns are used for both offensive and defensive purposes, as gangs aim to protect their interests or look to expand (CISC, 2010). A trend of random public shootings demonstrates how guns weaponize conflict between street gangs at the cost of innocent bystanders. Examples in Toronto include the death of Jane Creba, aged 15, who was shot on Yonge Street on Boxing Day 2005 (Scallan, 2012) and the Eaton Centre shooting on June 2, 2012, which claimed the life of two men and injured four more, including a 13-year-old boy (Criger, 2013). Violent gangs, random shootings, and media sensationalism heighten feelings of insecurity, pushing the issue of illicit guns into the public consciousness (CBC, 2012b). 2005 was dubbed the “Year of the Gun” by the Toronto media, as the number of gun-related homicides reached a record of 52 out of a total of 80 murders for the year, almost double the previous year’s total (Gazdic, 2007).

The first section of this article establishes the research problem and suggests what findings can be expected when studying transborder gun trafficking. The application of SNA as a method is explained, including an overview of terms regarding network structure, as well as definitions for brokerage, degree centrality, and betweenness centrality. The next section summarizes the cases to which SNA is then applied. Six diverse cases were selected as a representative sample that contrasts chain and hub transborder gun-trafficking networks over the last decade. All cases feature individuals arrested ($n=40$ subjects) and convicted for transborder gun-trafficking. The cases range from a few individuals bringing guns over the border to larger networks operated by street gangs or international crime syndicates. This range is representative of the spectrum of gun trafficking across Canada. The article concludes by situating transborder gun-trafficking networks in the broader context of SNA.

Research Problem

Research on Mexican drug cartels conducted by Payan (2006) demonstrates the degree to which legitimate cross-border movement can be exploited for nefarious purposes. As North America becomes more integrated, free-trade agreements, such as

NAFTA, actually facilitate the trans-border movement of both legitimate and illicit goods, people, and services (Hufbauer & Schott, 2005; Teslik, 2009), weapons, money, technical support, or other assets that enable violent extremist and organized criminal activities. Coordinating behavior, sharing information, and building relationships make networks effective for legal and illegal activity alike (Raab & Milward, 2003). Canada's federal government strictly regulates possession, storage, and transport of guns and ammunition, making it nearly impossible for gang members to obtain a firearm legally. Regulations on gun ownership are much weaker in the United States and vary by state. The mere existence of a border therefore offers an incentive to cross (Donnan & Wilson, 1999). By virtue of creating markets of opportunity, the border can affect marginal costs and, consequently, strategic behavior. Only a minor fraction of all crime guns in Canada are domestic, as this requires acquiring guns from stockpiles amassed through corruption or theft. This risky and unreliable practice is also expensive, as it includes bribes or robberies (Cook et al., 2009). Instead, criminals turn their attention south of the border. While some just drive across to pick up guns for themselves, brokers can supply entire gangs whose sustained demand can keep trafficking networks in business.

Guns and drugs often go hand in hand, in part because violence is an element of criminal enterprise. The competitive nature of the drug trade fuels violence between criminal groups, which drives up demand for firearms (CISC, 2010). *Guns for drugs* exchanges are common, which indicates the commoditized value of illicit firearms. However, gun and drug trafficking differ. Drug trafficking has long been prioritized as a public concern, whereas smuggled guns have only recently gained notoriety. Since drugs are illegal (although not necessarily criminal) in both the United States and Canada, a smuggling operation requires some level of sophistication on both sides of the border. Guns, by contrast, are available legally in the United States. The law is only broken when the guns are not declared upon entry at the Canadian border (and perhaps beforehand if serial numbers are removed). Furthermore, gun running can be opportunistic because it can yield considerable profit without a vast distribution network. A gun procured in the U.S. can sell for ten times its original price in Canada (Poisson & Bruser, 2013). Drugs, by contrast, require an extensive distribution network at the local level. The working hypothesis of this article is that borders impose transaction costs, but that it is not marginal cost, per se, that determines variation in the structure of transborder gun and drug trafficking networks.

Instead it is their purpose: if the motive is rent-seeking of easily saleable commodities, then simple networks suffice; however, if the motive is managing violence as part of a constituent element of criminal enterprise and/or the commodity requires downstream handling to realize profits, then more complex networks are required.

Networks have advantages over both hierarchies and markets. Hierarchies are the traditional mode of organizing; they are differentiated horizontally through divisions between units and vertically through levels of authority. Markets involve no consciously designed organizational structure, with the logic being that activities are loosely coordinated through price and contractual arrangements, and the law is resorted to as an instrument for resolving disputes between parties. Networks involve repetitive exchanges between a set of autonomous but interdependent organizations to achieve particular objectives. Networks balance the 'reliability' of hierarchies with the 'flexibility' of markets, making them a more efficient way for organizations to acquire resources and manage risk (Ebers, 1997) and to provide more effective means to manage complex problems requiring coordination between organizations (O'Toole, 1997).

Networks are widely recognized as the dominant social structure of criminal enterprises (Buchanan, 2002; Featherstone et al., 2007; Magourik et al., 2008) insofar as they link self-interested actors working towards common goals (Powell, 1990). Networks make it possible for criminals to overcome collective-action problems arising out of complexity and the uneven distribution of assets. Networks compensate for inadequate resources, identity, culture, emotions, elite access, ideological support, and recruits (Eilstrup-Sangiovanni & Jones, 2008; Giraldo & Trinkunas, 2007; Gunning, 2008; 2009). They "provide flexibility, adaptability, deniability, multidimensionality, and the capacity to do things at a distance, often through surrogates" (Sheffer, 2005: 159).

Method

Social network analysis is a well-established approach to understanding 'dark networks' (Milward & Raab 2006; Raab & Milward, 2003), including criminal enterprises (e.g., Malm & Bichler, 2011; Malm, Kinney, & Pollard, 2008; Morselli, 2010; Morselli & Giguere, 2006). SNA makes it possible to assess the nature of the relationships between actors and demonstrate the shape and structure of the network as whole. This is crucial for understanding the flow of resources and information in a network

and for utilizing the concepts of brokerage, degree, and betweenness centrality defined below.

Network structure may arise by design, as for example, when a business constructs an organizational chart to manage coordination and governance. However, many real-world networks are constructed because of the accumulation of pairwise connections, each of which is made locally by the two individuals concerned and with an element of serendipity. The properties of such a network are emergent, but the resulting structure may also be constrained by purpose and so can be revealing of “what works.” If the network does not contain the required actors, or if they cannot communicate as required, then the network is unlikely to be effective. Network structures matter because they dictate the flow of resources and information. Networks can take on a wide variety of forms, such as hub, all-channel, chain, and multi-player, but this article will focus on chain and hub. Chain networks connect nodes in a simple path: nodes are connected only to a single neighbor in each direction, except for the initial and final nodes. Hub networks have a single central node (or perhaps a small central core of nodes) connected to other nodes in a star: The peripheral nodes have few, if any, connections to other nodes. On the one hand, the central node provides the only connection between the other nodes; therefore, it has a high level of control or leverage. On the other hand, the central node is a single point of failure, and so a vulnerability, for the network. Multiplayer networks feature multiple central nodes. This allows for several brokers within one network, increasing the complexity and size of multiplayer networks compared to chain or hub networks.

Brokers have a positional advantage within networks, as they bridge structural holes (unconnected groups of actors), and have greater access to information, opportunities, and skills.

Degree centrality is a measure of the number of links that each node has—how well connected it is locally. Betweenness centrality is a measure of how often paths between other pairs of nodes pass through each node—how much it acts as a bridge between other parts of the network (Morselli, 2010). An ideal broker in a criminal network is a node that connects many parts of the network, and so has high betweenness centrality, but has few actual connections to other nodes, and so has a low degree centrality (Morselli, 2010, p. 386). This allows such a broker to manage the flow of information and resources in a network without being widely known and so vulnerable to identification and arrest when others are (Morselli, 2010, p. 384). However, while this configuration is ideal, it is also rare. Networks (especially smaller ones) will often feature one or two brokers with both high degree and betweenness centrality (Morselli, 2010).

When data limitations make the quantitative measurement impossible, the default is a qualitative approach. Notwithstanding the lack of quantitative measures, this is possible because ultimate decisions about the strength and frequency of ties were reduced to one of only four possible positions in the centrality matrix depicted in Table 1.

Interactions were defined as meetings, personal relationships, or the exchange of goods. Data were pieced together from various police reports and news articles. The resulting coding decisions regarding actors’ centrality was not an exact science. Nonetheless, they were sufficiently robust and reliable for clear distinctions to emerge among actors who are (1) high in one form of centrality, but (2) low in another, and (3) those who are high in both. Actors who were described as bridging network gaps were coded as having high betweenness centrality, while more isolated actors were coded as having low betweenness centrality. Based on the data, these bridges were shown to occur when one actor interacted with two different networks,

Table 1: Centrality Matrix

| | |
|------------------------------------|------------------------------------|
| High in degree, low in betweenness | High in betweenness and degree |
| Low in betweenness and degree | High in betweenness, low in degree |

providing a link between them, and enlarging the network in the process. Case-by-case results are depicted below in the context of the analysis of each network, comparative results are summarized as part of the subsequent discussion in Tables 2 and 3.

To understand the structure and operation of gun trafficking networks, as well as the implications that follow for deterrence, detection, disruption, dismantling, and public policy, this plausibility probe analyzes 6 networks involving 40 individuals. It is a plausibility probe insofar as the cases and data, although chosen to be representative, have inherent limitations. Omitted variables and selection bias mar the data because the criminal justice system may oversample individuals lower on the “food chain” where prosecution is more likely. For instance, none of the six cases involve cut-outs between mules (cross-border contraband carriers) and brokers (distributors). Quite possibly, gun networks do not use cut-outs, or it may be that the “successful” ones do and, as a result, have not been detected. Scope conditions were limited to cases with successful prosecutions; unsuccessful prosecutions may yield different results, but there is a lack of information regarding this outcome. Each network may also have missing edges because 250 subjects were arrested across the cases, but only 40 faced prosecution.

This article draws on six cases spanning 2007–2010. The scope of cases was limited to Ontario, Canada. The choice in time period was deliberate as case data is hard to come by, and this period happens to include three of the largest, most prominent cases in recent years: Project Blackhawk, Project Fusion, and Project Corral. A total of 250 people were arrested in connections with these networks. However, given the large scale of these police raids, it is likely that not all of the actors are relevant to the gun-trafficking networks within the scope of this article. Instead, this article concentrates on 40 individuals who were convicted for their roles in gun trafficking. The majority of these individuals were prosecuted in court, although some may simply have been mentioned in the court records and were not prosecuted, providing a limitation on the data. The cases range from small-scale, with a handful of guns being brought across the border, to large trafficking operations run by powerful gangs. The cases were selected because they were proven examples of networks, with more than one node being demonstrated in the data, and also because they had substantial evidence surrounding them aiding the research process. Evidence was obtained through public sources in the form of news articles and police reports. The data are relatively robust since much of the data were proven in court and involves people

who were convicted. Nonetheless, there are instances where data are missing on some minor actors.

Chain Networks

Peddie Case. Ronald McKenzie, Roger Peddie, and Chantelle Batte were arrested June 5, 2007. Chantelle Batte, a single mother from Sarnia, Ontario, was introduced to Roger Peddie (who used the alias “Jerome”) in 2007. He offered her \$400 to travel to Atlanta with him to pick up a package that she believed to be marijuana. Batte dropped Peddie off at a friend’s house in Port Huron, Michigan, and then she crossed back over the border by herself. The two later met up, and Peddie took the package of firearms out of the car (Poisson & Bruser, 2013). A police investigation showed that Peddie was working with Ronald McKenzie of Oshawa, who was rumored to be bringing in guns from the United States “at a rate of 30 to 40 a month” (Poisson & Bruser, 2013). The network targeted in the Peddie case is depicted in Figure 1.

Sundal Case. The gun trafficking operation conducted by Jesse Sundal and Stephen Bobb in 2008 was also basic. Sundal, of Fort Atkinson, Wisconsin, was legally buying guns in the United States and removing their serial numbers. He then gave the guns to Bobb, a college dropout from Toronto who was offered \$2,000 to smuggle firearms across the border (Poisson & Bruser, 2013). Bobb crossed twice, but on the second attempt, he was pulled over by a Michigan state trooper for speeding. Bobb’s behavior seemed suspicious, and his vehicle was searched (Trevelan, 2008). A secret compartment in the gas tank revealed five vacuum packed packages, each with two handguns and two magazines inside. The guns were traced back to Sundal, who was already on the radar of both Canadian and American police after crime guns in Toronto had been linked to him (Poisson & Bruser, 2013). Their network is depicted in Figure 2.

Hub Networks

Project Blackhawk. Project Blackhawk led to the arrest of Ugur Yildiz and his collaborators and clients in 2008. Yildiz was a Turkish-born resident of Chicago who smuggled firearms over the border at Windsor in the spring of 2006 following the closure of his gun store due to repeated infractions (Thompson, 2009). He transported guns hidden in his minivan across the border during three separate trips (Powell, 2009). Daniel Wasiluk of Windsor let Yildiz house the guns in his storage unit once across the border. At first, Yildiz attempted to sell the weapons to Wasiluk, but they could not agree on a price (Windsor Star, 2008). Yildiz was then put in

contact with Huy Ta, a key figure in an Asian crime syndicate. Following a meeting in a strip club, Ta agreed to purchase the firearms from Yildiz, leading to Yildiz becoming Ta's supplier. (Powell, 2009). Ta's network is hard to map due to incomplete information, but it is assumed to be extensive since the guns that he obtained from Yildiz have been found across Ontario (Powell, 2009). It is known that he supplied guns to a wide range of criminals, including meth lab operator Velle Chanmany (Powell, 2013) and the Vongkosy family in Richmond Hill (Kyonka & Barmk, 2008). The network targeted in Project Blackhawk is depicted in Figure 3.

Coles Case. 2008 also saw the arrest of Terrence Coles, a community-college dropout from Detroit. Recognizing the money to be made from transborder gun trafficking, Coles had recruited four cash-strapped women to act as mules, as his prior gun and drug convictions meant it was unlikely that he could cross the border. One mule was identified by the media as Denisa Manga of Windsor, while two were cousins, and the last one was 8 months pregnant (Bruser & Poisson, 2013). Coles legally purchased firearms at Detroit gun shops and then paid the women to carry them over the border to Windsor, where they were sold to Toronto-based gangs. Coles soon attracted police attention, as he began to exchange the guns for large quantities of Ecstasy tablets, prompting an investigation. Between February and June of 2008, Coles sold 35 guns for \$36,000 to individuals who turned out to be undercover police in Windsor, resulting in his arrest (Bruser & Poisson, 2013). The Coles case network is depicted in Figure 4.

Project Fusion. Lisa Parmanand of Toronto led an operation that smuggled firearms obtained in Illinois and Georgia and sent them into Canada across the Queenston Bridge at the Niagara Falls border crossing (Poisson & Bruser, 2013). Parmanand had a criminal past, including an arrest in 2005 for firearms trafficking and drug possession. Upon conviction, Parmanand served 33 months in jail (Powell, 2009). Parmanand's trafficking network was supplied by numerous mules, including David Barrett, who had moved back to Toronto after dropping out of a Seventh Day Adventist University in Washington State (Poisson & Bruser, 2013). Parmanand also worked with the operator of a safe house located on Glennana Road in Pickering, which housed many of the guns before they were sold (CBC, 2012a). Her primary client was Hubert Green, who controlled the 400 Crew and MNE gangs in Toronto through his lieutenants, Queen "Guggz"

Hibbert and Floyd "Tall Man" Atkins (Pazzano, 2009). Green kept these gangs supplied with narcotics through a connection with Courtney Ottey, a key figure in the Jamaican Shower Posse (SP) gang who was importing cocaine from his gang associates in Kingston, Jamaica (Powell, 2011). The guns and narcotics being trafficked into Canada served different purposes for MNE and the 400 Crew, as the guns were intended to keep gang members and drug dealers armed, while the drugs were to be trafficked further and sold by drug dealers employed by MNE and the 400 Crew as a source of revenue. The network targeted in Project Fusion is depicted in Figure 5.

Multiplayer Networks

Project Corral. Project Corral resulted in the seizure of 73 kilos of cocaine, over 100,000 ecstasy tablets, 19 guns, and thousands of dollars in cash (Vallis, 2010). Courtney Ottey, a Jamaican born resident of Toronto, and his associates were at the center of an operation that supplied feuding Toronto gangs with firearms and narcotics. Ottey was running what could be described as a "franchise" of the Shower Posse, an international criminal organization based in Kingston, Jamaica under the leadership of Christopher Coke (Balkissoon, 2010). It is important to note that the SP has been described as operating more like a Fortune 500 company than a street gang (DiManno, 2010). The SP operated a trafficking ring that smuggled drugs into Toronto from mules based in Panama and the Dominican Republic (Vallis, 2010). This was exemplified by the case of Oliver Willis, David Parker, and Mauro Guiseppe, three Canadian citizens who were arrested in the Dominican Republic when 72 kilograms of cocaine meant for export to Canada were discovered in the bed of their pickup truck (Powell, 2010). Guns were imported to Toronto through networks ran by Derrick Smith (Balkissoon, 2010). The Toronto chapter consisted of around ten members, and, in typical SP fashion, none were involved in street-level crime (DiManno, 2010). Ottey acted as a guns and drugs wholesaler to the warring Five Point Generalz (5PGz, which he also controlled) and Falstaff Crips (Powell, 2010). Ottey was aided by Neigabe Stewart, who took over operations of the 5PGz while he was under house arrest for various drug trafficking offences (Pazzano, 2010). At the time of Project Corral, Ottey was out on bail, having been arrested on drug trafficking charges as part of Project Fusion a year earlier. The Toronto chapter was also supplied with drugs from the SP headquarters in Jamaica. It appears that in exchange for the narcotics, cash (profits from the drug trade) and guns originally trafficked from the United States were being sent

back to Jamaica as a form of tribute. Several key members of the Toronto SP, such as Courtney Ottey and Derrick Smith, used the SP network to remit money to family members in Jamaica, and Smith was even building a house there (Powell, 2010). Police wiretaps indicate that Ottey communicated with key members of the Jamaican SP's leadership, most notably Coke. Coke also had a sister who lived in the

Greater Toronto Area, who provided a place for him to stay when he visited Toronto to check on SP business (Baksh, 2012). Little information is available on Coke's sister, but her presence in Canada underscores the close ties between Toronto and the SP. The network run by the Toronto SP is depicted in Figure 6.

Figure 1: Peddie Case

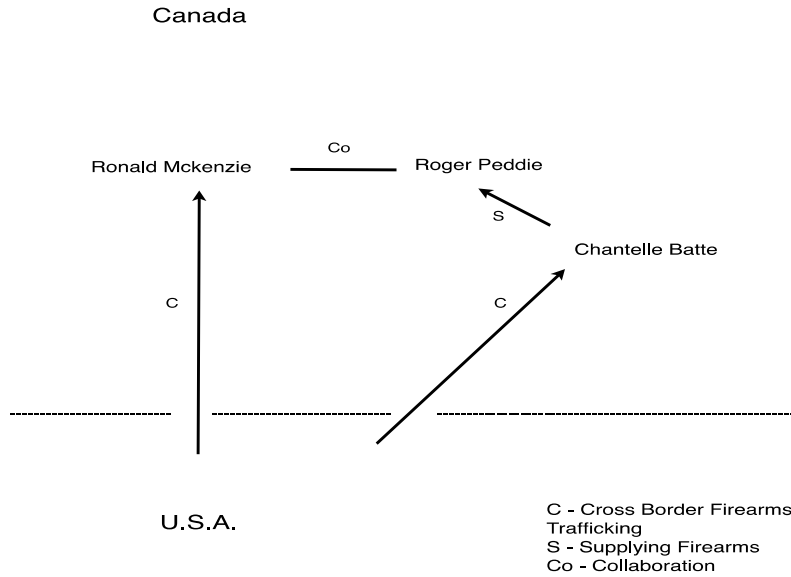


Figure 2: Sundal Case

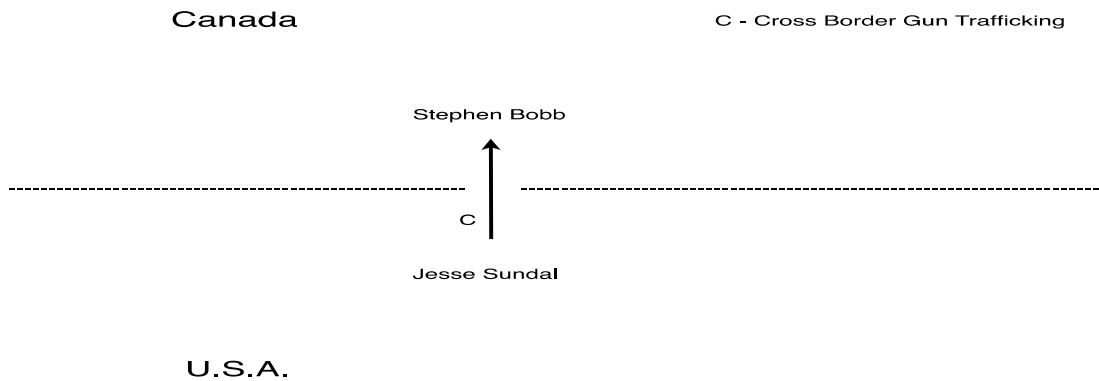


Figure 3: Project Blackhawk

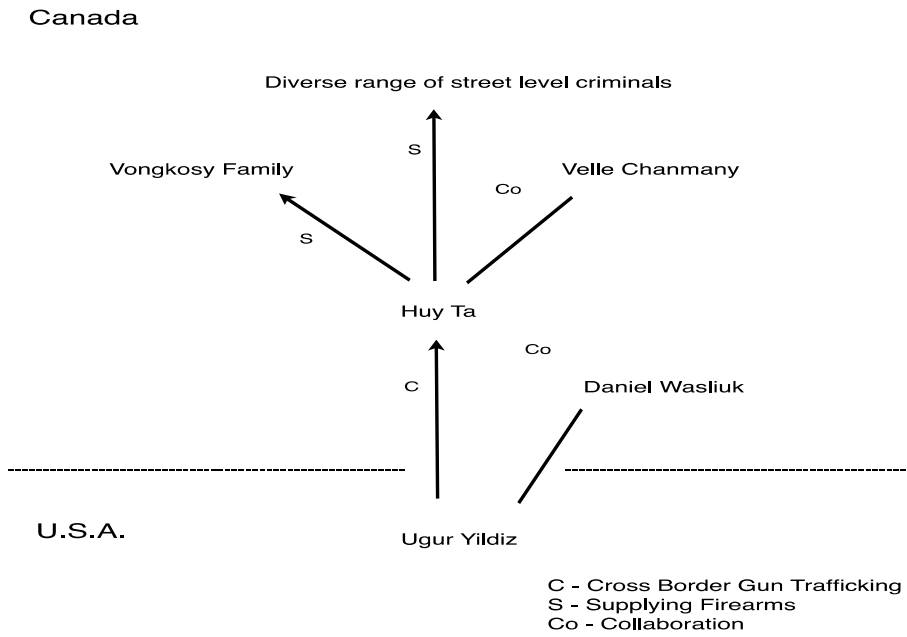


Figure 4: Coles Case

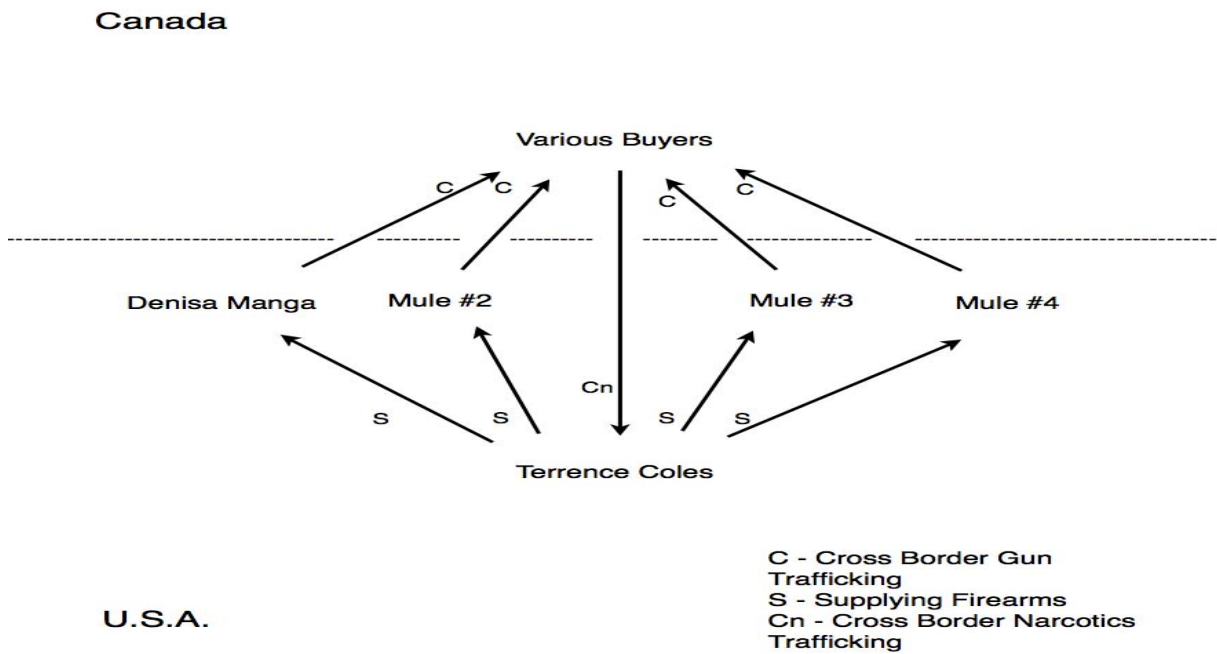


Figure 5: Project Fusion

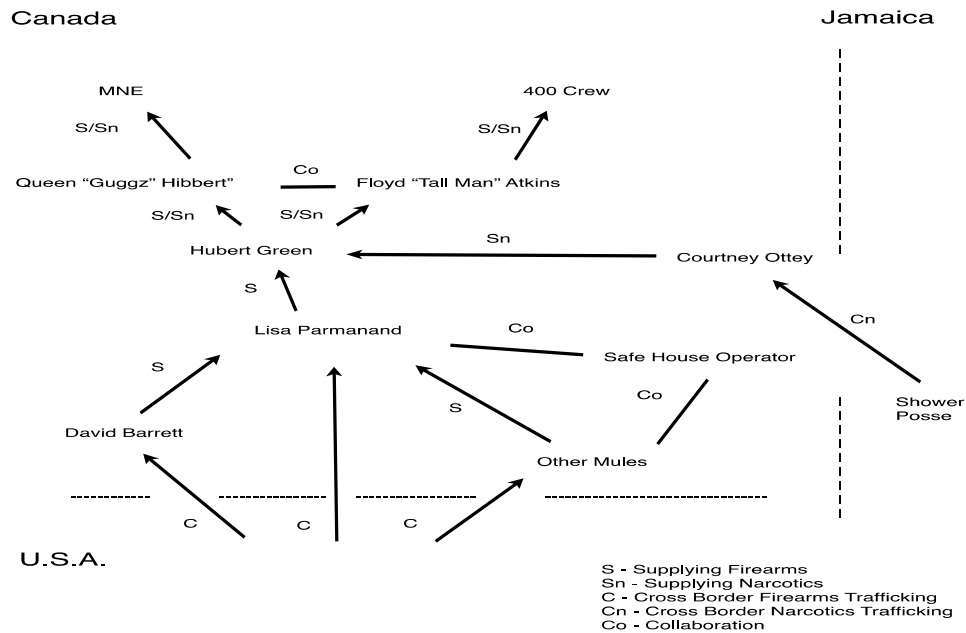
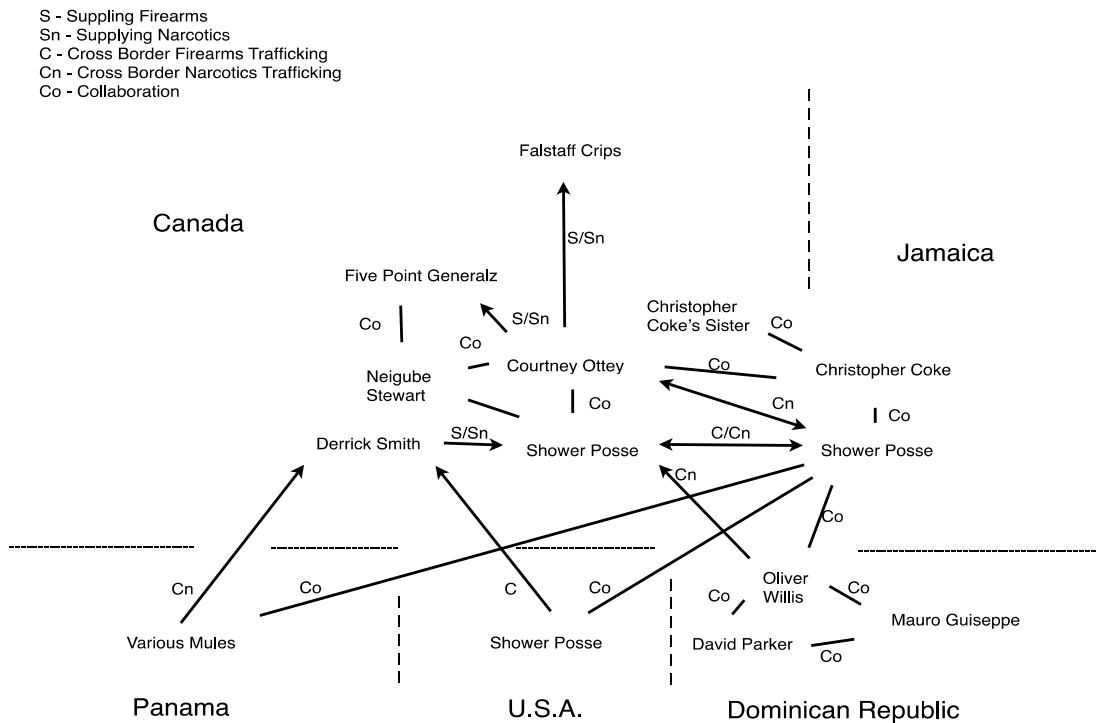


Figure 6: Project Corral



Findings

The findings show that several networks took the form of a simple chain network. In the Peddie Case, the network was unsophisticated and the number of actors limited. McKenzie was acting independently, and merely collaborated with Peddie, who was operating a basic chain network with Batte as the mule. Batte was targeted for recruitment as a mule due to her poor financial situation at the time. Peddie can be identified as the broker due to his command over information in the network, but the small scale of the network stymies his degree and betweenness centrality. The unsophisticated nature of the network meant it was simple for police to disrupt it. The Sundal case is the most basic form of chain network. Two actors collaborated, and neither one had significantly more influence or access to information or resources than the other. The simple nature of the network also made it easy to disrupt.

Other cases took the form of hub networks. In Project Blackhawk, Ta acted as a broker with high betweenness centrality, connecting Yildiz, the gun seller, and the various buyers. However, considering his wide-ranging connections, he also possessed a high degree centrality, meaning that he was not an ideal broker. The arrest of Ta and Yildiz ensured that this gun trafficking network was cut off, as the main supplier and the main broker were both incarcerated. The Coles Case was another basic hub network, entirely masterminded by Coles, the best connected actor, and his brokerage kept the operation running. Coles acted as a basic broker, controlled the flow of the guns in the network, and connected his mules with buyers across the border.

The network targeted in Project Fusion was a hub network, as almost all the nodes were connected to Green or Parmanand. Parmanand was the seller, Green was the buyer, and neither would have had much contact with the other's network, so they bridged a key structural gap. They also controlled the flow of information in the network. Mules, such as Barrett, did not have access to much information. There is no evidence to suggest that Barrett was aware of where the guns were destined once he had delivered them to Parmanand, and it does not appear that he ever came in contact with Green or his network. Instead, Barrett simply fulfilled his functions in the network, remaining on the periphery. Ottey does not seem to have had a particularly close connection to the network. While he connected with Green, his link seems to be weaker than Parmanand's. In addition to the financial incentive for doing business, Ottey and Green shared a Jamaican background. Ethnic capital may thus be a factor in their collaboration. Given Parmanand and

Green's high degree centrality and high betweenness centrality, they were not ideal brokers—their arrests dealt a crippling blow to the trafficking network. Conversely, Ottey remained a key figure in the SP until his arrest as part of Project Corral in 2010 (Powell, 2011).

The network taken down by Project Corral differs from other cases because of different command, control, and communication structures: SP USA was supplying SP Toronto, but SP USA and SP Canada were otherwise unconnected as communication was relayed through SP headquarters in Jamaica. The SP did not just traffic but also commodified guns. Besides keeping the Toronto SP and its affiliated gangs armed, guns were being sent to Jamaica. Canada is not the only country where guns are considered a valuable commodity among criminals, and traffic in guns from the US to Canada enables global diffusion from Canada. The SP's international drug trafficking network saw narcotics shipped from Jamaica, Panama, and the Dominican Republic to an enormous market of buyers in the United States, Canada, and Great Britain. The network was tightly organized, and calculated decisions were made to ensure that SP influence was maintained. During Jamaican elections, international drug prices would spike, as the SP fundraised for their chosen political candidates (Halfnight, 2010).

The focus on the drug trafficking probably resulted in the network taking on a much more complicated structure than the gun-focused trafficking networks. From the available information, it appears that the Toronto SP trafficked drugs using a multi-player network with numerous well-connected and influential nodes. Their gun trafficking network, by contrast, was relatively simple: a hub network, with Derrick Smith as the broker, ferrying guns across the border using his system of mules. With his high betweenness centrality, Smith bridged the US and Canadian branches. It is harder to determine the extent of Smith's degree centrality, as less is known about his mule network, but his place within the Toronto SP and Jamaican connections indicate that he was hardly an ideal broker.

Cross-border gun trafficking networks are tactical and indicative of strategic behavior, as they are driven by the pursuit of profit. At a markup of 1000%, the operation yields enough profit for suppliers and their mules. Although the data in these six particular cases are insufficient to code the profit variable conclusively, there is circumstantial evidence to support it. When Yildiz was forced to shut down his gun store in Chicago, he resorted to making money by selling his cache of weapons to Ta. Mules, such as Batte or Barrett, were in difficult

financial situations and were lured into gun trafficking through the promise of quick, easy money. In contrast to the profit-motive of chain networks, organized crime groups obtain most of their profit through drug trafficking. Their main priority when it comes to guns is the security of their organization. MNE, the 400 Crew, the Falstaff Crips, and the 5PGz were all looking to arm their men to protect their interests and revenue stream. Guns allowed gangs to defend themselves against rivals and to intimidate opponents. This, combined with their scarcity in Canada, is what made guns such a valuable commodity among street gangs.

In several cases, guns were traded for drugs: Coles was exchanging guns from Michigan for Canadian Ecstasy, Ta was keeping Chanmany armed in exchange for crystal meth, and the Toronto SP sent tribute weapons back to headquarters in Jamaica as partial payment in exchange for the drugs they supplied. This confirms the value of guns as a commodity among criminal groups and also suggests the existence of a criminal exchange system based on bartering illicit goods rather than currency. This may help make their activity harder to trace, as it removes the paper trail that money creates. In some cases, it also demonstrates the further trafficking and diffusion of guns once they cross the Canadian border, helping to explain why they can be so hard to track.

Discussion

The first hypothesis is that cross-border gun trafficking networks take the form of simple chain networks or slightly more advanced hub networks. Given the availability of legal guns in the United States, it is understandable why chain networks are so

prevalent: cross-border trafficking is as simple as a crossing the border. Chain networks also appear to be easy to disrupt. Simply removing one actor breaks the chain. Table 1 (*supra*) shows the different combinations of betweenness and degree centrality that a network can have. Tables 2 and 3 then place the actors in the various networks within this centrality matrix. Table 2 shows that the actors in chain networks are relatively equal in terms of centrality. This results in an equal flow of information and resources through the sequential actors in a chain network; consequently, when one actor is compromised, so are the others. This explains why there are so few examples of members comprising chain cross-border gun trafficking networks escaping arrest when their ring is discovered and disbanded by law enforcement.

Hub networks seem to have greater capacity. Table 3 indicates a sizable range in degree and betweenness centrality between the various actors in hub networks. Mules tend to be low in both centralities, coordinated by a broker who bridges the gap between the supply of guns being delivered by the mules and the buyer who often takes the form of an organized crime syndicate. The bridge provided by these brokers establishes them as the crux of the network, shown in Table 2 as high betweenness centrality. Without their presence, the supply of guns can be easily cut off. The various gun trafficking networks observed in this article met their ends as brokers were compromised and arrested. While targeting brokers appears to be an effective way of disrupting the cross-border gun-trafficking networks that take the form of hub networks, the more challenging task is to ensure that more brokers do not take their place and more networks spring up to fill the void.

Table 2: Chain network structure and centrality scores

| Network Name | Nature of Network | Actors | Role | Centrality |
|--------------------|-------------------------|-----------------|-------------------|---|
| Peddie Case | Transborder Trafficking | Roger Peddie | Broker | All actors had relatively equal degree and betweenness centrality |
| | | Ronald McKenzie | Independent Actor | |
| | | Chantelle Batte | Mule | |
| Sundal Case | Transborder Trafficking | Jesse Sundal | Equal Partner | Actors had equal degree and betweenness centrality |
| | | Stephen Bobb | Equal Partner | |

Table 3: Hub network structure and centrality scores

| Name | Nature of Network | Actors | Roles | Centrality |
|---------------------------|--|---|--|---|
| Project Blackhawk | Transborder Gun Trafficking with connections to the domestic drug trade | Ugur Yildiz | Gun Supplier | High degree and low betweenness |
| | | Huy Ta | Broker | High degree and betweenness (broker) |
| | | Daniel Wasiluk | Collaborator | Low in both centralities |
| | | Velle Chanmany | Gun Buyer | Low in both centralities |
| | | Vongkosy Family | Gun Buyer | Low in both centralities |
| | | Diverse range of street level criminals | Gun Buyer | Unknown, but likely low in both centralities |
| Coles Case | Transborder Gun Trafficking with connections to the transborder drug trade | Terrence Coles | Broker | High degree and betweenness (broker) |
| | | Denisa Manga | Mule | Low in both centralities |
| | | Mule #2 | Mule | Low in both centralities |
| | | Mule #3 | Mule | Low in both centralities |
| | | Mule #4 | Mule | Low in both centralities |
| Project Fusion | Transborder Gun Trafficking with connections to the international drug trade | Lisa Parmanand | Broker | High degree and betweenness (broker) |
| | | Hubert Green | Broker | High degree and betweenness (broker) |
| | | Courtney Ottey | Drug Supplier | Low degree and high betweenness (ideal broker) |
| | | Queen “Guggz” Hibbert | Green’s Lieutenant | High degree centrality and low betweenness centrality |
| | | Floyd “Tall Man” Atkins | Green’s Lieutenant | High degree centrality and low betweenness centrality |
| | | Safe House Operator | Collaborator | Low in both centralities |
| | | David Barrett | Mule | Low in both centralities |
| | | Other Mules | Mule | Low in both centralities |
| | | Project Corral | Transborder Gun Trafficking and International Drug Trafficking | Courtney Ottey |
| Derrick Smith | Broker | | | High degree and betweenness (broker) |
| Neigabe Stewart | Ottey’s Lieutenant | | | High degree centrality and low betweenness centrality |
| Christopher Coke | Head of Showerhead Posse | | | Low in both centralities (likely a broker in his own network though) |
| Christopher Coke’s sister | Collaborator | | | Low in both centralities |
| Oliver Willis | Broker | | | High degree and betweenness (broker in his Dominican trafficking operation) |
| David Parker | Mule | | | Low in both centralities |
| Mauro Guiseppe | Mule | | | Low in both centralities |
| Various Mules | Mule | | | Low in both centralities |

The second hypothesis is that transborder gun trafficking networks take simpler forms than transborder drug trafficking networks, as manifested in different network structure. For both kinds of networks, the actual cross-border piece is analogous: a number of parallel border-crossers and a single collector node on the other side. That there is only one collector node is likely a function of trust: If mules had more than one person to whom they report, it would become easy to cross the border and go into business for themselves. It is surprising that collectors do not set up cut-outs between themselves and the arriving mules. That would make them much harder to detect.

There are two differences between the two kinds of networks. The first arises from the ease of obtaining the commodity. Since guns are readily available, no structure is needed to handle acquisition. In contrast, obtaining drugs requires access to a global pipeline, a more sophisticated and extensive acquisition process, and a network to support it. The second difference is related to the objects being transported. On one hand, profit per gun is large, and the collectors do not bother to establish distribution networks. This is their Achilles heel: They get ratted out by those to whom they sell. On the other hand, drugs are sold in much smaller quantities, forcing collectors to build and work through distribution networks, which protect them from being ratted out because they are further from the people who get arrested. In Project Corral, drug trafficking took the form of a complicated multi-player network, with numerous influential actors, as shown in Table 1 by the large number of actors who are high in both centralities. The gun trafficking network that was being operated by the same organization was different. Despite the capacity that the SP had to run a complex network, their transborder gun trafficking network was unsophisticated. The network hinged on only one or two key brokers to maintain a steady flow of weapons across the border.

The demographic attributes summarized in Table 4 indicate that actors are 75% male and 70% were 30 or younger when they committed these crimes, although this trend bifurcates for mules and brokers. Whereas mules tend to be younger (20–25) and female, brokers are more likely to be older (in their 30s) and male. Certain demographics appear disproportionately vulnerable to recruitment. The nodes in these cases suggest that men dominate transborder gun trafficking: 23 subjects were male, and 7 were female. Only one woman, Lisa Parmanand, acted as a broker; all other women were mules, or, as in the case of Christopher Coke's sister, peripheral to the network. If Parmanand is treated as

an outlier, it appears that women involved in transborder gun trafficking tend to have low degree and betweenness centrality. While information about the mules in these networks is limited, five of the known mules were female, and four were male. Women appear less likely to be brokers but not necessarily more likely to be mules. The limitations of the data concerning transborder gun trafficking networks notwithstanding, it appears that men are more likely than women to have higher degree and betweenness centrality. The majority of subjects involved were Canadian: among 31 subjects, 18 were Canadian, 6 were American, and 7 were Jamaican, and the disproportionate number of Jamaicans is likely unrepresentative, a function of the influential role played by the Shower Posse gang, particularly in the case of Project Corral. This influential role is likely demonstrated by the fact that none of the Jamaicans who participated in a network did so as mules, whereas Canadians and Americans were equally represented as both brokers and mules.

In Table 2, dates of birth of the known actors involved in transborder gun trafficking in these six cases reveals that—in line with the broader literature on criminal deviance—most actors were in the 20s or early 30s when they participated in gun trafficking. The median year of birth is 1980. Mules, however, were younger than the brokers for whom they were working. Their youth may have rendered them more vulnerable, both to being drawn into the underworld of gun trafficking in the first place and to being influenced more by brokers.

From Tables 1 and 2, preliminary conclusions about the relatively simple nature of gun trafficking networks follow. They do not require a complex operation south of the border. Instead, Canadians just cross into the United States, purchase firearms, and then return to Canada. With respect to gun trafficking networks, the transaction costs imposed by the border appear low compared to the vast markets of opportunity it creates. The prerequisites are a ready supply of guns south of the border and someone who is willing to purchase guns legally in the United States and then bring them across the border. Single cases of gun trafficking, or simply individuals who do not require a larger network to profit from gun trafficking, are thus quite possible. The ease with which individuals can cross and the large supply of legal guns in the United States seems to allow for the proliferation of many small, unsophisticated gun trafficking networks. That explains why even gun trafficking networks with significant organized crime connections do not appear to differ substantially from those operated by a handful of individuals.

Limitations are imposed on a more in-depth analysis because important nodes are sometimes placeholders for entire groups; it might matter how those groups connect internally. For example, is

there one person in the Jamaican SP who "handles" Canada, or this a shared responsibility? The same problem arises with the SP node in Canada in Figure 6.

Table 4: Demographic attributes of nodes

| Cases | Actors | Gender | Country of Origin | Country of Residence | Age at the time of the case | Role |
|--------------------------|---|--------|-------------------|----------------------|-----------------------------|--------------------------|
| Peddie Case | Roger Peddie | M | Canada | Canada | Unknown | Broker |
| | Ronald McKenzie | M | Canada | Canada | Unknown | Independent Actor |
| | Chantelle Batte | F | Canada | Canada | 28 | Mule |
| Sundal Case | Jesse Sundal | M | U.S.A. | U.S.A. | 30 | Equal Partner |
| | Stephen Bobb | M | Canada | Canada | 20 | Equal Partner |
| Project Blackhawk | Ugur Yildiz | M | Turkey | U.S.A | 38 | Gun Seller |
| | Huy Ta | M | Canada | Canada | Unknown | Broker |
| | Daniel Wasiluk | M | Canada | Canada | 31 | Collaborator |
| | Velle Chanmany | M | Canada | Canada | 27 | Gun Buyer |
| | Vongkosy Family | N/A | Canada | Canada | N/A | Gun Buyers |
| | Diverse range of street level criminals | N/A | Canada | Canada | N/A | Gun Buyers |
| | | | | | | |
| Coles Case | Terrence Coles | M | U.S.A. | U.S.A. | 23 | Broker |
| | Denisa Manga | F | Canada | Canada | 20 | Mule |
| | Mule #2 | F | U.S.A. | U.S.A. | Unknown | Mule |
| | Mule #3 | F | U.S.A. | U.S.A | Unknown | Mule |
| | Mule #4 | F | U.S.A. | U.S.A | Unknown | Mule |
| Project Fusion | Lisa Parmanand | F | Canada | Canada | 29 | Broker |
| | Hubert Green | M | Jamaica | Canada | 37 | Broker |
| | Courtney Ottey | M | Jamaica | Canada | 32 | Drug Supplier |
| | Queen "Guggz" Hibbert | M | Canada | Canada | 25 | Green's Lieutenant |
| | Floyd "Tall Man" Atkins | M | Canada | Canada | 27 | Green's Lieutenant |
| | Safe House Operator | M | Canada | Canada | Unknown | Collaborator |
| | David Barrett | M | Canada | Canada | 22 | Mule |
| | Other Mules | N/A | N/A | N/A | N/A | Mule |
| Project Corral | Courtney Ottey | M | Jamaica | Canada | 33 | Broker |
| | Derrick Smith | M | Jamaica | Canada | Unknown | Broker |
| | Neigabe Stewart | M | Jamaica | Canada | 27 | Ottey's Lieutenant |
| | Christopher Coke | M | Jamaica | Jamaica | 41 | Head of Showerhead Posse |
| | Christopher Coke's sister | F | Jamaica | Canada | Unknown | Collaborator |
| | Oliver Willis | M | Canada | Canada | 30 | Broker |
| | David Parker | M | Canada | Canada | Unknown | Mule |
| | Mauro Guiseppe | M | Canada | Canada | Unknown | Mule |
| | Various Mules | N/A | N/A | N/A | N/A | Mule |

Policy Implications and Conclusion

Lösch (1954) and Helliwell (1998, 2002) posit that borders affect transaction costs. Although it may not be illegal to purchase a gun in the US, altering a car's fuel tank to put in a hidden compartment, for instance, is surely a vulnerability whose cost has a deterrent effect. If the border imposed high marginal costs on trafficked goods, we would expect to see complex networks. This appears to be the case for drugs, but less so for guns: Trafficking in drugs requires volume to turn a profit; trafficking in guns does not. Ergo, policy differentials across borders, and the markets of opportunity they create, matter: A commodity that is legal on one side of the border but not the other is subject to trafficking for direct or indirect gain by means of relatively simple chain or hub networks. Complex multi-player networks appear necessary, by contrast, when a good is illegal on either side of the border and profit is a function of volume.

Mapping the structure of gun trafficking networks is imperative to understanding how best to target and disrupt these networks. It is simple to compromise the actors in a chain network, and if a broker can then be located in a hub network, he or she can be targeted, and the whole network will be disrupted. This is especially true of brokers who traffic guns since they have a high degree centrality to match their high betweenness centrality; that is, while they bridge important structural gaps in networks, they are widely known throughout the network, as they are the key contact for the other actors. This means that few gun traffickers are ideal brokers precisely because they are subject to being identified by so many other members of the network, which makes them an easy target for identification by law enforcement. The unsophisticated nature of these networks also helps to explain why they are plentiful: Provided that one knows how to tap into the market, they are simple to set up and simple to operate. For this reason, the real challenge of understanding cross-border trafficking networks is not how to target brokers and the networks they connect, but how to discourage people from becoming brokers and enabling networks to regenerate. For this reason, the Intelligence-Lead Policing (ILP) model focuses on disrupting and dismantling networks by concentrating scarce resources on brokers in the form of dynamic network analysis and target selection.

The nature of the border and ready supply of guns in the United States is unlikely to change. Considering that it is difficult to have influence over the supply of guns, and there is a strong incentive for simple networks trafficking guns to regenerate to fill

a void in a highly profitable market, depressing demand is the default strategy in combating cross-border gun trafficking networks. This can be done by working with at-risk communities and through deterrence. However, even in at-risk communities, relatively few individuals actually obtain a gun. As a result, criminal intelligence in support of law enforcement is probably the most efficient way to have a strong deterrent effect. There is no need to target the network at large—concentrating scarce resources on brokers will yield maximum payoff, as long as the gun network collectors do not set up distribution. This decreases vulnerability since the effort involved in setting up distribution is discouraged by the sheer availability of guns across the border.

References

- Baksh, N. (2012, January 19). Toronto murders drop after Jamaica-based gang crackdown. Retrieved from the CBC website
<http://www.cbc.ca/news/canada/toronto-murders-drop-after-jamaica-based-gang-crackdown-1.1132109>
- Balkissoon, D. (2010, May 25). Deadly shower posse gang has deep ties to Toronto. *Toronto Star*. Retrieved from
http://www.thestar.com/news/crime/2010/05/25/deadly_shower_posse_gang_has_deep_ties_to_toronto.html
- Bruser D. & Poisson, J. (2013, April 18). Star investigation: how one U.S. gun broker moved firearms across the border. *Toronto Star*. Retrieved from
http://www.thestar.com/news/investigations/2013/04/18/star_investigation_how_one_us_gun_broker_moved_firearms_across_the_border.html
- Bruser, D. & Poisson, J. (2013, April 18). Here's what Detroit gun broker Terrance Coles had to say from prison. *Toronto Star*. Retrieved from
http://www.thestar.com/news/investigations/2013/04/18/heres_what_detroit_gun_broker_terrance_coles_had_to_say_from_prison.html
- Buchanan, M. (2002). *Nexus: Small worlds and the groundbreaking science of networks*. New York: W.W. Norton.

- CBC. (2012a, June 9). Toronto woman gets 10 years on gun charges. Retrieved from the CBC website <http://www.cbc.ca/news/canada/toronto/story/2012/01/09/toronto-guns-drugs-smuggling-jamaica.html>
- CBC. (2012b, July 19). Toronto gun violence puts pressure on leaders. Retrieved from the CBC website <http://www.cbc.ca/news/canada/toronto/story/2012/07/19/toronto-scarborough-street-party-shooting.html>
- Cook, P. J., & Cukier, W., & Krause, K. (2009). The illicit firearms trade in North America. *Criminology and Criminal Justice*, 9(3), 265–286. doi: 10.1177/1748895809336377
- Criger, E. (2013, June 1). One year later: Looking back at the Eaton Centre shooting. *City News*. Retrieved from <http://www.citynews.ca/2013/06/01/1-year-later-looking-back-at-the-eaton-centre-shooting/>
- Criminal Intelligence Service Canada. (2010). *Report on Organized Crime* (25th ed.). Criminal Intelligence Services Canada. Ottawa.
- DiManno, R. (2010, May 4). Raid exposes international crime group. *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2010/05/04/raid_exposes_international_crime_group.html
- Donnan, H., & Wilson, T. M. (1999). *Borders: Frontiers of identity, nation and state*. New York, NY: Berg.
- Ebers, M. (1997). Explaining inter-organizational network formation. In M. Ebers (Ed.), *The formation of inter-organizational networks* (pp. 3–40). Oxford, UK: Oxford University Press.
- Eilstrup-Sangiovanni, M., & Jones, C. (2008). Assessing the dangers of illicit networks: Why al-Qaida may be less dangerous than many think. *International Security* 33(2), 7–44. doi:10.1162/isec.2008.33.2.7
- Featherstone, D., Phillips, R., & Waters, J. (2007). Introduction: Spatialities of transnational networks. *Global Networks* 7(4), 383–391. doi: 10.1111/j.1471-0374.2007.00175.x
- Gazdic, A. (2007, December 26). Despite rise, police say T.O. murder rate “low.” Retrieved from <http://www.ctvnews.ca/despite-rise-police-say-t-o-murder-rate-low-1.268936>
- George, A., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge: MIT Press.
- Giarlo, J. K., & Trinkunas, H. A. (2007). Introduction. In J. K. Giarlo & H. A. Trinkunas (Eds.) *Terrorism financing and state responses: A comparative perspective* (pp. 7–20). Palo Alto, CA: Stanford University Press.
- Gunning, J. (2008). Terrorism, charities, and diasporas. In T. J. Biersteker & S. E. Eckert (Eds.) *Countering the financing of terrorism* (pp. 93–125). New York: Columbia University Press.
- Halfnight, D. (2010, May 7). No remedy for “Posse:” International drug cartel in Toronto’s Northwest End. *National Post*. Retrieved from <http://news.nationalpost.com/2010/05/07/no-remedy-for-%E2%80%98posse%E2%80%99-drug-cartel-calling-the-shots-in-toronto%E2%80%99s-northwest-end/>
- Helliwell, J. (1998). How much do national borders matter? Washington, DC: Brookings Institution.
- Helliwell, J. (2002). Measuring the width of national borders. *Review of International Economics*, 10, 517–524. doi: 10.1111/1467-9396.00347
- Hufbauer, G., & Schott, J. J. (2005). *NAFTA Revisited: Achievements and Challenges*. Washington, DC: Institute for International Economics.
- Kyonka, N., & Barmak, S. (2008, June 21). Raid nets four family members. *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2008/06/21/raid_nets_four_family_members.html
- Linden, R. (2010). *Comprehensive approaches to street gangs in Canada*. Public Safety Canada. Retrieved from <http://www.publicsafety.gc.ca/lbrr/archives/cn25166656-eng.pdf>
- Lösch, A. (1954). *The economics of location* (2nd ed., W. H. Woglom with W. F. Stolper, Trans.). New Haven, CT: Yale University Press.
- Magourik, J. Atran, S., & Sageman, M. (2008). Connecting terrorist networks. *Studies in Conflict and Terrorism* 31(1), 1–16. doi:10.1080/10576100701759988
- Mahoney, T. (2011). *Homicide in Canada, 2010*. Retrieved from <http://www.statcan.gc.ca/pub/85-002-x/2011001/article/11561-eng.htm>

- Malm, A., & Bichler, G. (2011). Networks of collaborating criminals: Assessing the structural vulnerability of drug markets. *Journal of Research in Crime and Delinquency*, 48(2), 271–297. doi: 10.1177/0022427810391535
- Malm, A., Kinney, B., & Pollard, N. (2008). Social network and distance correlates of criminal associates involved in illicit drug production. *Security Journal*, 21(1–2), 77–94. doi:10.1057/palgrave.sj.8350069
- McKie, D. (2013, May 1). Gun seizures up but fears of porous border remain. Retrieved from <http://www.cbc.ca/news/politics/story/2013/05/01/pol-cbsa-weapons-seized-border-guns.html>
- Milward, B. H., & Raab, J. (2006). Dark networks as organizational problems: Elements of a theory. *International Public Management Journal*, 9(3), 333–360. doi:10.1080/10967490600899747
- Morselli, C. (2010). Assessing vulnerable and strategic positions in a criminal network. *Journal of Contemporary Criminal Justice*, 26(4), 382–392. doi: 10.1177/1043986210377105
- Morselli, C., & Giguere, C. (2006). Legitimate strengths in criminal networks. *Crime, Law and Social Change*, 45(3), 185–200. doi: 10.1007/s10611-006-9034-4
- O'Toole, L. (1997). Treating networks seriously: Practical and research-based agendas in public administration. *Public Administration Review*, 57(1), 45–52. doi: 10.2307/976691
- Payan, T. (2006). *The three U.S. –Mexico border wars: Drugs, immigration and homeland security*. Westport, CT: Praeger Security International.
- Pazzano, S. (2009, April 3). Two gangs, one “feared” leader. *Toronto Sun*. Retrieved from <http://www.torontosun.com/news/torontoandgta/2009/04/03/8986286-sun.html>
- Pazzano, S. (2010, May 3). Toronto Posse providing guns to gangs. *Toronto Sun*. Retrieved from <http://cnews.canoe.ca/CNEWS/Crime/2010/05/13/pf-13929821.html>
- Poisson, J., & Bruser, D. (2013, April 12). Star investigation: Star reporters buy cheap U.S. gun, no ID required. *Toronto Star*. Retrieved from http://www.thestar.com/news/investigations/2013/04/12/star_investigation_star_reporters_buy_cheap_us_gun_no_id_required.html
- Poisson, J., & Bruser, D. (2013, April 19). The gun pipeline: Mules who bring firearms across the border pay high price for fast money. *Toronto Star*. Retrieved from http://www.thestar.com/news/investigations/2013/04/19/the_gun_pipeline_mules_who_bring_firearms_across_border_pay_high_price_for_fast_money.html
- Powell, B. (2009, April 3). Woman, 29, gangs’ alleged supplier. *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2009/04/03/woman_29_gangs_alleged_gun_supplier.html
- Powell, B. (2009, August 29) Portrait of a gunrunner. *Toronto Star*. Retrieved from http://www.thestar.com/news/crime/2009/08/24/portrait_of_a_gunrunner.html
- Powell, B. (2009, September 19). Toronto ruling puts gunrunner case in U.S. on hold. *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2009/09/19/toronto_ruling_puts_gunrunner_case_in_us_on_hold.html
- Powell, B. (2010, May 5). Street gangs still thriving despite big busts. *Toronto Star*. Retrieved from http://www.thestar.com/news/crime/2010/05/05/street_gangs_still_thriving_despite_big_busts.html
- Powell, B. (2011, November 11) Man sent to prison for cocaine, cleared on gang charges. *Toronto Star*. Retrieved from http://www.thestar.com/news/crime/2011/11/30/man_sent_to_prison_for_cocaine_cleared_on_gang_charges.html
- Powell, B. (2013, February 2013). Defense lawyer alleges Toronto officers diverted 7 Kilos of meth into her client’s car. *Toronto Star*. Retrieved from http://www.thestar.com/news/crime/2013/02/11/defence_lawyer_alleges_toronto_officers_diverted_7_kilos_of_meth_into_her_clients_car.html
- Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behaviour*, 12(1), 295–336.
- Raab, J. & Milward, B. H. (2003). Dark networks as problems. *Journal of Public Administration Research*, 13(4), 413–439. doi: 10.1093/jpart/mug029

- Royal Canadian Mounted Police. (2007, November 23). *Current Trends in Firearms Trafficking and Smuggling in Canada*. Retrieved from <http://www.rcmp-grc.gc.ca/ci-rc/reports-rapports/traf/index-eng.htm>
- Scallan, N. (2012, June 2). Eaton Centre shootings: Violence recalls Jane Creba's death on Boxing Day 2005. *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2012/06/02/eaton_centre_shooting_violence_recalls_jane_crebas_death_on_boxing_day_2005.html
- Sheffer, G. (2005). Diasporas, terrorism and WMD. In: A. Blum, V. Asal, and J. Wilkenfeld (Eds.) Nonstate actors, terrorism and weapons of mass destruction. *International Studies Review* 7(1), 133–170. doi: 10.1111/j.1521-9488.2005.479_11.x
- Thompson, C. (2009, December 19). Gun smuggler imprisoned. *Windsor Star*. Retrieved from <http://www2.canada.com/windsorstar/news/story.html?id=1f76b8e1-2771-466e-bfcc-48e686d191f6>
- Trevelan, E. (2008, October 18). Guns bound for Canada, Feds say. Retrieved from http://host.madison.com/news/local/guns-bound-for-canada-feds-say/article_f13f0fb9-ae40-5773-ac48-5d9fe4bdfdd3.html
- Vallis, Mary. (2010, May 4). Massive police raids executed across Ontario: Project Corral. *National Post*. Retrieved from <http://news.nationalpost.com/2010/05/04/massive-police-raids-executed-across-toronto-ottawa-this-morning/>
- Vandaele, I. (2011, December 30). By the numbers: Toronto's murder rate drops sharply in 2011. *National Post*. Retrieved from <http://news.nationalpost.com/2011/12/30/by-the-numbers-torontos-murder-drops-sharply-in-2011/>
- Windsor Star. (2008, June 20). Windsor area a "Conduit for illegal guns," Police Say. Retrieved from <http://www.canada.com/windsorstar/news/story.html?id=62db3670-2eef-4034-84d5-5d7056d31315>

About the Authors

Christian Leuprecht is Associate Dean of the Faculty of Arts and Associate Professor of Political Science at the Royal Military College of Canada, and cross-appointed to the Department of Political Studies and the School of Policy Studies where he is a fellow of the Queen's Centre for International and Security Policy as well as the Institute of Intergovernmental Relations.

Andrew Aulhouse is completing his BA (Hons.) in Political Studies at Queen's University, and will be graduating in the spring of 2015. He currently works as a research assistant in the Queen's University School of Policy Studies. He is interested in the intersection between academic research and public policy.