Gangs and Drugs: Maintaining Border Security Using Crime Analysis and GIS

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Abstract

Canada Border Services Agency (CBSA) is responsible for maintaining the integrity of the Canadian border. There are multiple layers of complexity involved in protecting Canadian land and citizens. Drug smuggling in particular is a large focus for the agency. This paper provides an overview on the fundamentals of crime analysis as it is used in the intelligence capacity to conduct risk assessments as they pertain to foreign travellers and goods attempting to enter Canada. In addition, the complexity of gang networks as they are involved in drug smuggling are examined, as well as how CBSA can utilize network analysis and geographic information systems (GIS) to aid investigations and operations planning.

Keywords: crime analysis; gangs; drugs; border security; GIS; CBSA

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Chapter 1. Introduction

Crime analysis is used to explore trends, threats, vulnerabilities, and risk assessments. It connects a series of events together to give law enforcement officers a focused starting point. It also helps plan effective tactical operations by having a geographic focus. Intelligence analysis is used to examine a network of offenders. Networks are fluid and have links that expand across international borders, thus making border security important. Drug trafficking in particular involves a complex distribution network that crosses multiple borders. Each country has common narcotics that they are known to smuggle, thus making analysis and intelligence important to border officers for enforcement purposes. I had the opportunity to work as a Student Border Services Officer in two Vancouver operation centres and experienced first-hand the importance of intelligence and performing accurate risk assessments.

Crime analysis is being used in intelligence-led policing initiatives at many police departments. The benefits of having personnel dedicated solely to analysis increase both the efficiency and effectiveness of the process for the organization. There are several different analysis applications, although the focus of this paper will be on the use of geographic information systems (GIS) and mapping. Crime analysis and crime mapping combine through the application of the intelligence cycle. Maps are then presented at Compstat meetings with police management. Compstat stands for Computer Statistics or Comparative Statistics and will be discussed in more detail further on. Lastly, criminal intelligence analysis and mapping are used to further understand gangs. Specifically, they are used to explore the complicated gang networks that currently operate in the Lower Mainland.

Crime analysis helps solve investigations, especially series crimes that involve more than one event. Almost all crimes can be analyzed, making analysis an extremely useful tool for police departments. Analysis increases the ability to prosecute offenders as well by connecting series crimes together, giving a case more strength. Agency missions are supported by crime analysis (Santos, 2013). For example, if an agency wants to focus on reducing youth crime, an analyst may map common youth crimes, such as break and enters, to see if they cluster around certain high schools. These

schools could then be targeted by other approaches, such as safe school liaison programs. Because crime analysts spend much of their time performing queries and reading database records, they can assist in database development upgrades to make the computer databases easier to use and more efficient for other personnel. Lastly, crime analysis can help foster relationships between management and general duty police by providing a common focus and goal to work towards (Santos, 2013). There can be a large disconnect between the different levels in the police hierarchy. However, analysis reports show everyone why certain areas or people need to be focused on.

Chapter 2. Crime Analysis and Mapping

Crime analysis using crime mapping is a relatively new tool being utilized by police agencies across North America. Geographic information systems (GIS) are software programs that can be used to map and create a visual and statistical analysis of crime from a spatial perspective (Chainey & Ratcliffe, 2005). Police personnel need to understand where offenders live and spend most of their time, as well as what influences their movement between places (Chainey & Ratcliffe, 2005). Knowing how offenders move between places can help determine which crimes are likely to be part of a pattern of events. Law enforcement began using GIS technology when environmental theories of crime began to emerge between 1980 and 2002. During this time, capabilities of computer systems increased while their costs decreased (Ratcliffe, 2004).

Using maps in crime analysis links written data to a visual presentation to help communicate analysis results. Crime maps can be used for many purposes, including home addresses of people who are on probation and crime reduction evaluations before and after a strategy has been implemented. Maps can also show addresses with high calls for service or home and business addresses of known gang members. It is important to note that presenting a map of the results of these searches is not a conclusion to the problem, but a more focused starting point to help police management understand the problem. For general duty police officers, crime maps help guide patrols. The human eye is able to easily focus on visual objects and interpret items that may seem abnormal (Hirschfield & Bowers, 2004, p. 6). Therefore, visual interpretation of patterns and their meaning is much easier for general duty officers than interpreting complex statistical results.

Mapping Related Theories

Brantingham and Brantingham (1984) were the first to formally theorize that crime does not occur randomly. Therefore, analysts use theory to make sense of these patterns (Hirschfield in Tilley, 2005, p. 633). There are several theories that are used to make sense of crime, including routine activities theory, rational choice theory, the idea of crime attractors, generators, and detractors, and crime pattern theory. Routine activity theory explains how changes in activity patterns lead to changes in crimes (Cohen & Felson, 1979). The theory has three major focus areas that all must converge in space and time for a crime to occur: a motivated offender, suitable target, and lack of a capable guardian. By removing any one of these elements, the risk of crime occurring is

eliminated. The circumstances that allow for a motivated offender to commit a crime include the perceived exposure, proximity, accessibility, inertia and attractiveness of a target. A suitable target is something worth stealing, taking, or controlling. The last component is the absence of a capable guardian who could prevent the crime from happening. It is important for a crime analyst to be aware of these principles when examining areas where a certain crime is frequently occurring. It is not only the time and place in which a crime occurs that is important, but also the context within which crime occurs (Hirschfield in Tilley, 2005, p. 635). Routine activities form the backcloth for an event process (Brantingham & Brantingham, 1993). This backcloth is the basis off of which a criminal event occurs. For example, if there is an area where drug trafficking is frequently happening, we may assume that there is a lack of a capable guardian in that area as we have motivated offenders and suitable targets who will purchase the drugs. An analyst may recommend that police increase patrols in that area and examine a map before and after patrols are increased to see if that has an impact on crime levels.

Rational choice theory explains how offenders weigh the costs and benefits of committing a crime, particularly the risk of getting caught versus the perceived benefit of succeeding (Clarke & Felson, 1993). For analysts, it is important to understand the modus operandi, or how crimes have been committed, to ensure that the recommendations that are made are appropriate to the situation. For example, if gang murders are occurring as drive-by shootings, interventions may want to focus on the sale and cross-border trafficking of guns. Another example is modifying street networks. In criminally attractive areas, houses that are located in cul-de-sacs and on dead-end streets experience the lowest burglary rates (Bevis & Nutter, 1977, in Brantingham & Brantingham, 1993).

Brantingham and Brantingham (1995 in Tilley, 2005) examine the existence of crime generators and crime attractors. Crime generators bring together large numbers of people for legitimate purposes that create numerous opportunities for crime to occur. Crime attractors are areas that are specifically frequented by offenders because of known criminal opportunities, such as drug-trafficking areas. Crime detractors have characteristics that discourage crimes, such as surveillance or the presence of stable, well-run businesses. The geometric theory of crime discusses the presence of nodes, paths and edges (Brantingham & Brantingham, 1993). Nodes are activity hubs, pathways connect nodes, and edges are the boundaries between areas where different activities occur, such as work and entertainment. On an edge, many different people,

motivated offenders and suitable targets alike, have legitimate access to the area. Crimes are more likely to occur along edges because people who do not usually associate will come across each other in these areas. For example, gang members frequently come into contact at the edges of their claimed territory. Research has proven that there is a relationship between location and gang rivalries (Radil, Flint & Tita, 2010 in Hegemann et al., 2011). Analysts can create interactive maps with different layers to show different hours in the day and days of the week. This would show the same area with different flows of people.

Crime Analysis Improvements

Eck (1998 in Chainey & Ratcliffe, 2005) observed that analysts do not incorporate theory into their analysis as often as is necessary. For example, they may observe that a hotspot exists in a certain location, but fail to use theoretical concepts to explain why it exists in that area. Because of this, the analyst is not "analyzing" the crime problem but merely giving a description. Most new analysts lack experience, so they receive a significant amount of training and mentoring in the first few years (Santos, 2013). It is also noted that analysts generally do not come from a policing or crime reduction background, so their products may lack an academic or theoretical background. This can be improved upon by creating products in consultation with other police management with proven skills and expertise.

In some detachments, there is a barrier between the analysts as civilian members and sworn officers who have gone through police training. Increasing communication channels and allowing analysts to go on patrols with regular officers to view hotspots and high crime areas first hand can help close this gap. This not only helps the analyst visualize the area, but also increases contact between sworn officers and civilian members allowing them to form a productive relationship.

Compstat

Analysis reports are used to support Compstat meetings or Computer and Comparative Statistics policing (Chainey & Ratcliffe, 2005). Compstat involves the use of GIS to inform police strategy. Compstat is a "goal-oriented strategic management process that uses computer technology, operational strategy, and managerial accountability to structure the manner in which a police department provides crime-control services" (Walsh, 2001, p. 347 in Ratcliffe, 2004, p. 72). It is next to impossible to plan effective tactical operations and strategy without some sort of geographic focus, and this is how GIS is beneficial. Compstat meetings involve the Officers In Charge,

commanders of the different police departments, and crime analysts, in a discussion regarding the crime trends and patterns occurring in the recent time.

There are four main goals of Compstat meetings. The first is to provide accurate intelligence information in a timely fashion. The New York Police Department (NYPD) was one of the first agencies to successfully implement Compstat (Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2003). NYPD hold meetings twice a week in which territorial commanders report on crime problems to higher level management (Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2003, p. 426). This allows for crime patterns to be addressed in the timeliest matter for a large organization. The Surrey RCMP holds their Compstat meetings every two weeks. The second goal of Compstat meetings is to employ effective tactical considerations. The officer in charge of a certain section will summarize the issue and explain how this issue will be addressed. This is usually accompanied by crime statistics, including weekly, monthly, and annual statistics broken down by district and overall totals (Weisburd, Mastrofski, McNally, Greenspan, & Willis, 2003). Other officers who are present at the meeting may also give their input on the tactical operation. Each police municipality is broken up into districts, each with their own district commanders. If one district is experiencing a certain crime problem, it may also be occurring in other districts. Therefore, district commanders usually work together on crimes that are occurring on the borders of two or more districts. The third goal is rapid deployment of information and resources. Crime is dynamic and the response to crime needs to be dynamic as well. The resources that respond to crime include general duty officers and plain-clothes units. However, resources are limited and detachment priorities determine which crime problems get to utilize these resources. The final goal of Compstat meetings is continuous follow-up and assessment of tactics. There is little use in discussing crime trends and using costly resources if the operation's effectiveness is not measured.

Compstat meetings have a particular emphasis on the location of crimes. Mapping, in particular, is useful because of the current nature of information that is presented (Chainey & Ratcliffe, 2005). Detachments that have Compstat meetings every two weeks are using current data that is prepared by the analysts the day before the meeting. Because crime is dynamic, there needs to be a dynamic way to analyze and respond to crime. Using GIS allows for users to create different map layers to show different crimes trends and changes on one map. Electronic pin maps are used to show where crime clusters geographically and temporally (Weisburd, Mastrofski, McNally,

Greenspan, & Willis, 2003, p. 427). People who view the map are able to turn the layers on and off, depending on which type of crime or change they are interested in. For example, the person in charge of property crime would talk about the layer that depicts break and enters, while the head of the gang task force would use the layer that shows gang residences, territories, and shootings. Other layers may show more details about a crime, such as if an arrest was made (Chainey & Ratcliffe, 2005). This shows management that the problem has been dealt with, at least in the short term. This makes for a more streamlined approach and saves the crime analyst time from making many different maps.

There is also much advancement beyond a simple map that GIS programs can perform. For example, stolen vehicles may be linked to their recovery location using colour coding (Chainey & Ratcliffe, 2005). Gang member's residences may be colour coded according to the gang they belong. Gang murders may be linked to residences or clubhouses. Maps also allow for a flexible interactive environment where detachment management can request map customizations from the analyst, promoting partnership. Some detachments run their Compstat meetings in a very interactive way, where queries are being run during the meeting and it is more of a participatory seminar than lecture by the police chief (Chainey & Ratcliffe, 2005).

Unfortunately, many police managers are not educated in effective policies and practices (Ratcliffe, 2004). Management must be flexible and willing to change and adapt tactics with short notice. Many are not trained in crime prevention initiatives and how to interpret crime maps. The burden to interpret, teach and suggest solutions then usually lies on the crime analyst.

Chapter 3. Intelligence Analysis

Intelligence analysis identifies and examines the networks of offenders, typically those involved in organized crime, but also prostitution and fraud rings (Santos, 2013, p. 60). Intelligence analysts often work with police departments in other jurisdictions as these networks usually span across boundaries. Intelligence data is obtained through a variety of sources, such as wiretapped conversations, human sources and undercover operations. The variety of sources only adds to the work that an intelligence analyst has to do as the validity and reliability of the data is questionable. Many pieces of conflicting information are presented and it is up to the analyst to sort through it and determine the most complete story. Intelligence analysis uses GIS and mapping to show the relationships between individuals in a crime network (Santos, 2013, p. 63). Locations where they live, work, and spend most of their time are generally analyzed. These places are then compared to the locations of gang-related crimes to see the spatial relationship between the two.

The Intelligence Cycle

The intelligence cycle is a problem-solving model used in crime analysis. It uses a number of steps that are followed in a circular motion (Hill & Paynich, 2010). Inevitably, each issue that is analyzed will raise further questions, theoretically creating an infinite cycle. The cycle starts with the assignment of a task from management (Chainey & Ratcliffe, 2005). Management will observe the data available from police officers, dispatch and community leaders and decide on a topic that will be analyzed. That information is then passed on to the analyst. The analyst begins with the collection of data that can come from a variety of sources. For example, an intelligence analysis of gangs in a Canadian city would have data from the police information database, Canadian Police Information Centre (CPIC) searches, human sources, information from other law enforcement personnel, and from officers in specialized gang units. The information must be collected accurately and consistently. This information is then evaluated to confirm or deny the validity and reliability of the information. Special consideration is paid to contradictory information. When this happens, the reliability of the source becomes even more important. The data collection step involves filtering out irrelevant information and arranging the relevant information in an organized fashion. This usually involves a database that is created by the analyst on programs such as

Microsoft Access. This improves the ability to query the data. Lastly, this step involves geocoding so the data can be analyzed spatially.

The next step in the problem-solving model is collation. Information that is stored in police databases is generally not conducive to analysis on its own. There is extra information that is irrelevant to analysts or is in a format that is difficult to work with. The collation stage of the model involves cleaning the data to correct mistakes and make the data consistent and easy to work with (Federal Bureau of Investigation, 2013). In terms of gang networks, this step involves establishing relationships between individuals.

A crime analyst then analyzes the data to find patterns and trends. There are many different forms of analysis, depending on the data. There are tactical, strategic, administrative, and intelligence analyses. Intelligence analysis involves analyzing crime networks such as the relationships between gang members and between gangs.

The final step is dissemination of the data to police management and personnel. This may be done in a variety of formats, usually by written and verbal debriefs, but also by e-mail, websites and presentations. Written reports usually involve an executive summary of all the analysis points, followed by a more detailed report that may involve tables, charts and maps. The purpose of creating intelligence products is to influence a crime prevention action (Chainey & Ratcliffe, 2005). It is important to keep the audience in mind when creating analysis products. People have different knowledge levels and certain definitions may need to be clarified depending on the audience. For example, a presentation to other crime analysts may not warrant an explanation of environmental criminology theories, but presentations to the public would require a brief overview to facilitate understanding.

The final product that is disseminated will then be subject to feedback and review to examine the impact that the product had. Feedback should include the quality of the work, the topics that were analyzed, and how useful the analysis was for decision-making (Santos, 2013, p. 59).

Chapter 4. Future Advancements

While gangs are quickly evolving to try to stay ahead of law enforcement, technology is advancing just as rapidly. Therefore, it is imperative that crime analysts are frequently provided with updated training. New techniques and GIS add-ons are always being developed, so the training should reflect these trends. Crime analysis and intelligence-led policing are growing at a rapid rate (Ratcliffe, 2004; Wilson, 2007). This is partially because of software developments in GIS and other spatial software programs (Wilson, 2007). However, management in some detachments has failed to see the immense benefits from technology and a skilled, educated analyst. Well-known high-profile cases that are investigated using GIS may further boost knowledge about the technology.

The use of crime mapping and GIS technology in crime analysis departments has grown immensely over the last few decades. The technology and expertise can be used to represent and analyze almost all crime types and the visual aspect makes it accessible to those who do not have specialized training. However, there is still a gap between analysts and management that can be closed through further integration and cooperation while working on projects. Crime analysts also need to be trained to use the software, techniques and theories in a way that is effective for the agency. While crime is dynamic, crime analysis is also dynamic and is helping investigate and solve crimes that would otherwise not be possible to explore.

Chapter 5. Gangs and Analysis

Gang members are more involved in crime than other offenders, both in frequency and in seriousness (Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993, p. 55). Gangs affect everyone. People are afraid to walk into their own neighbourhoods and money is directed towards gang control, police response, and prevention programs (Klein & Maxson, 2006, p. 20). In Canada, both corrections and police agencies agree that gang membership and activities are increasing (Grekul & LaBoucane-Benson, 2008). It is important to study and analyze gangs because innocent people are victims of various crimes, while youth are captured by the gangster lifestyle of crime, drugs, violence, prison, and death.

Just as crime is not evenly distributed across space, gangs are not evenly distributed across space either. Gangs tend to congregate in small areas within a neighbourhood called a “set space” (Tita, Cohen, & Engberg, 2005, p. 273). However, this is traditionally true for gangs based in the United States. In the Lower Mainland, gangs do not operate in strict geographic boundaries. Previous gang research has shown that the environment where gangs are formed lacks informal social control. There are several social and demographic factors that are important, but physical features play an important role as well. For example, areas with less surveillance, high-rise buildings, vacant lots and poor lighting have differing levels of social control. Guardianship and abandonment were seen to be two important characteristics for set space (Tita, Cohen, & Engberg, 2005). It is important for analysts to be aware of these findings as routine activities theory can be used to explain them.

Organized gangs are extensively involved in serious drug use and drug sales, particularly cannabis in Canada, because of the popularity with the public, profitability, and relative ease of production and cultivation (National Intelligence Analysis, Criminal Intelligence, & Royal Canadian Mounted Police, 2009). Organized gangs have codes of conduct and methods of personal and territorial identification (Chatterjee, 2006). As noted previously, gangs typically operate in “set spaces” where they spend most of their time and conduct most of their business (Hegemann et al., 2011). Identifying each gang’s set space can help identify the edges in which they may come in contact with and perhaps conflict.

Youth gangs are becoming increasingly present in suburbs; schools have become known as gathering places. Slinger (2011) found that gangs are primarily made

up of middle-class, suburban adolescents and adults. However, youth membership is fairly fluid, especially in areas where gang problems are developing (Starbuck, Howell, & Lindquist, 2001). This gives hope for prevention programs, as many youth are not deeply entrenched in the gang lifestyle.

The average age of gang members in Canada is between 14 and 16, although recent gangs that have emerged include older adolescents and adults (Chatterjee, 2006). Street gangs tend to be younger than more organized drug gangs on average (Klein, 1995). More organized groups, such as the Hells Angels, include individuals in their 40s, 50s, and 60s. The entry-level position in a gang for an adolescent—who may be called initiates or "juniors"— is usually drug trafficking (Fagan, 1989, p. 635). The older gang members—who may be referred to as "vetranos" and "OGs" (old guys)— are more involved in the logistics of the drug trade, although their involvement may be spurious (Fagan, 1989, p. 639).

Young people are introducing technology into gangs. Because of their expertise, youth may use cell phones for dial-a-dope lines, and use the Internet to communicate and track legal proceedings to identify witnesses to intimidate. Police scanners, surveillance equipment, and microphones have all been used to impede law enforcement or spy on rival gangs. Youth may act as lookouts and distributors because of these technological skills.

It is important to understand the organization and behaviours of gangs in order to develop prevention programs. Having an intervention that is successful in one jurisdiction does not mean that it will be successful in another (Starbuck, Howell, & Lindquist, 2001). The local problem and characteristics need to be understood before interventions can be successfully developed and implemented. This further emphasizes the importance of crime and intelligence analysis performed in each police jurisdiction.

Using GIS to Analyze Gangs

In the Lower Mainland, GIS and crime mapping is being used to map gang homicides. While there is no distinct pattern to the homicides, victims are commonly found dead near their homes, work or leisure spaces, such as in gym parking lots. This leads us to infer that the murder suspects have a basic understanding of individual "set space". Because individuals spend most of their time in relatively few activity spaces, as explained by the geometric theory of crime, gang members use surveillance on rival gang members to find these most commonly visited areas, which eventually contributes to the victim's demise. Individuals spend most of their time in very few places and many

make a habit of attending these places at certain times. Through surveillance, other gang members have picked up on the routine activities of rival gang members and used this to their advantage. The next step for GIS and crime mapping in the Lower Mainland would be to track and map the routine activities of other gang members and use those areas to guide patrols and the resources of the gang task force.

The policing division of Hollenbeck in Los Angeles is a model for the usage of geographic information systems to simulate individual movement for gang analysis (Hegemann et al., 2011). Hollenback is fairly isolated from gang activity outside the region because it is surrounded by the Los Angeles River. Most of the gang conflict originates from geographic territories, rather than drug territory, as is the case in the Lower Mainland. The model uses behavioural dynamics and geographic constraints to create simulations. By using geography, human patterns can be predicted and gang interactions and rivalries can be modeled.

Initial pattern identification is difficult when analyzing gangs. Ad hoc linking is a common starting point to identify gang members. It involves linking people together by memory from everyday work (Paulsen, Bair, & Helms, 2009). Gang members can be distinguished as fringe or core members (Klein, 1971 in Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993). Core members are more involved in and committed to the gang than fringe members, who are not permanent fixtures. Police identify several individuals they consider core members who they feel most represent or are most heavily entrenched in a gang and relay that information to a crime analyst. The analyst then takes those individuals and further examines their contacts in PRIME. Unfortunately, it is not a systematic method.

Chapter 6. Gangs in Vancouver

History in British Columbia

Over 130 criminal gangs operated in British Columbia as of 2011 (Slinger, 2011). BC is a major hub for gang activity. Gangs have operated in Vancouver for over 50 years, but have become more well known in the last 10 years. Some of the gangs began and remain solely in Vancouver, while others are part of international criminal organizations. Location-wise, Vancouver is in a very strategic position for drug smuggling. Vancouver is a harbor city, close to the US border, a fertile marijuana growing area, and on the coastline connecting to Asia (Slinger, 2011; The Canadian Press, 2010). Canada also does not have restrictions on importing large quantities of materials to manufacture drugs, such as pseudoephedrine. These factors make it an ideal city to be involved in the drug trade (Slinger, 2011). All of these factors contribute to the boom of the drug import and export business (The Canadian Press, 2010).

Organized crime groups have taken advantage of the factors that allow for smuggling. “The links between street gangs and organized crime exist across race/ethnicity and culture and national boundaries” (Thrasher, 1936 as cited in Chatterjee, 2006, p. 131-132). In modern Canada, this is just not the case anymore. Gangs in the Lower Mainland are not divided by strictly territorial boundaries, but by dial-a-dope networks, nor are they divided among ethnic lines (Slinger, 2011). Gangs exist anywhere there is a demand for drugs, and many gangs seize that opportunity and have expanded into more remote areas. Traditional gang boundaries do not exist in the modern landscape. Modern youth gangs are less territorially based than classic gangs (Starbuck, Howell, & Lindquist, 2001). Many gangs are represented in one neighbourhood, but may fight over product territory, such as drug production, human smuggling, prostitution, debt collection, or security (The Canadian Press, 2010). Gangs in Vancouver are not specialized in certain types of crime, but drug trafficking is the most common (Vancouver Police Department, 2010).

Abbotsford is only ten minutes away from the US border, ideal for cross-border drug trafficking, and was named the murder capital of Canada for all its gang murders. A gang war began to emerge and adolescents who were only marginally involved in gang life and drug trafficking were being killed as a message to rival gangs (Slinger, 2011). Grow rips were a common reason for rival gang murders. Grow rips happen when someone steals from a marijuana growing operation. Gangs in the Lower Mainland are

all connected because they share the same drug suppliers, such as drug cartels in Mexico (ctvbc.ca, 2009). Problems with these suppliers contribute to gang wars. These international connections undoubtedly make policing more complicated and increase the difficulty of maintaining a safe and secure border.

Border security is difficult to maintain in this state of globalization. Trade is open and movement between countries is common for individuals. For the Canada-USA border in particular, economic benefit far outweighs the threats that are present. However, borders need to be fortified to stop illegal activity, but cannot hold up the everyday traffic of people and goods. This became particularly apparent after the 9-11 terrorist attacks (Cottam & Marenin, 2005). Herein lies the difficulty for border security agencies. Drug smuggling occurs in both imports and exports of all countries. Canada experiences both of these phenomena. Through cooperation with other agencies, particularly in the United States, special teams, operations, and projects attempt to break up drug smuggling and the international crime groups who are involved.

The implementation of NAFTA (01 January 1994) was a response to globalization by Canada, the United States, and Mexico. However, open borders for positive purposes also provide more opportunities for illegal activity (Cottam & Marenin, 2005). For transnational crime networks, borders are virtually non-existent. However, for law enforcement, these borders are very apparent (Desroches, 2005, p. 40). The drug trafficking industry is a global one and its estimated value in 1994 was $500 billion (Williams, 1994, p. 99). Transnational organized crime is a threat to national security because of its dynamic nature. Rapid change is necessary to exploit opportunities while avoiding risks (Public Safety Canada, 2013, p. 6).

Most countries have laws that prohibit the activities that culminate to allow for drug trafficking. This includes the manufacturing, growth, importation, distribution, and use of narcotics, which are regulated by the Controlled Drugs and Substances Act (CDSA) in Canada. Under section 6.1 of the Controlled Drugs and Substances Act, it is illegal to import or export any controlled substance in or out of Canada (Desroches, 2005, p. 21). By having laws that prohibit the legal trade of narcotics, legitimate competitors are eliminated, bringing the drug trade into the black market. The inherent risk that comes with illegal trade inflates the cost of the product, contributing to large profits for criminal networks. Drug prohibition, not unlike alcohol prohibition from 1919 to 1932, has fuelled the growth of drug cartels and large criminal organizations (Desroches, 2005, p. 1).

Chapter 7. The Logistics of Drug Smuggling

There are several levels that operate in the drug trafficking operation (Desroches, 2005, p. 2). There are the individuals who grow or manufacture drugs and may be based in different countries. The middlemen connect these individuals to those who become the drug consumer. The middlemen may be smugglers or drug mules who bring the product over international borders. The connection to cartels or organizations in source countries are very important for Canadians involved in the drug trade, especially countries who source cocaine, heroin and hashish. Higher-level individuals include the growers, manufacturers, importers and wholesalers who control the movement of large quantities of drugs (Desroches, 2005, p. 2). Lower level individuals are the street-level dealers. It is often difficult to arrest higher-level traffickers because they are well protected by many layers of middlemen and street-level dealers (Desroches, 2005, p. 30). Therefore, most high-level individuals are arrested for conspiracy to traffic or import drugs (Desroches, 2005, p. 30). The cartels in Colombia exhibit the many levels that are involved in drug smuggling operations.

In terms of transnational drug smuggling, the cartels in Colombia have been examined thoroughly. Naylor (2002 in Desroches, 2005) argues that cartels do not hold the monopoly power that many think they do. Most growers of coca are independent farmers in Peru and Bolivia, while a smaller number of manufacturers and refiners exist (Desroches, 2005; Williams, 1994). Some of these manufacturers move their own product while others hire professional smugglers. Cartels will often use a variety of transport techniques, concealment techniques, and routings to avoid interception by law enforcement (Williams, 1994, p. 101). For example, cocaine has been shipped to the Bahamas before being shipped to Florida (Williams, 1994, p. 101). Another routing involves passing through Mexico before being smuggled across the land border into states such as Texas and New Mexico (Williams, 1994, p. 101). More often, wholesalers in host countries will buy the product to sell to dealers (Naylor, 2002 in Desroches, 2005, p. 40). Naylor argues that it is not just the cartels setting prices; there is a much more complicated series of transactions that sets the price. The restrictions on the movement of people in and out of countries make it difficult for cartels to completely control the market. Because of these restrictions, it is more difficult for cartels to transport their people into host countries to control operations (Desroches, 2005, p. 41). Therefore, the cartels deal with local wholesalers to control the sale in host countries.

Organization

Drug trafficking requires a large amount of capital, knowledge of the drug trade, reliable and trustworthy associates, and a number of suppliers, distributors, and couriers who are willing to transport the drugs across international borders (Desroches, 2005, p. 38). This requires some level of organization among the network. Most gangs are loosely connected, temporarily assembled, and not very dense (Klein, 1995). Many organized crime groups are short-lived, only forming these temporary networks for a crime opportunity (Albanese, 2004). However, there can be network cliques that are very cohesive and are best analyzed at this individual or clique level (McGloin, 2005).

Ethnic ties are crucial to the links in some illegal networks (Malm, Bichler, & Nash, 2011). These networks generally show strong structural cohesion (Malm, Bichler, & Van De Walle, 2010). It is rare that ethnic groups will collaborate with other ethnic groups, especially Asian crime groups, although it will happen occasionally for specific activities (Malm, Bichler, & Nash, 2011). Groups who are involved in a specific illegal enterprise are formed based on the roles that are required for the operation and have multi-ethnic membership (Malm, Bichler, & Nash, 2011).

Because gangs are so diverse, they cannot be defined or described as having a single structure. Although “gangs pattern themselves in stable and recognizable forms”, they are different in structure and behavior (Klein & Maxson, 2006 in Spindler & Bouchard, 2011, p. 264). Gangs can be categorized based on the crime they commit or the size and leadership structure. For example, street gangs, including youth gangs, commit more versatile crimes, while drug gangs are focused on trafficking, importation and exportation (Klein, 1995).

Organized gangs are extensively involved in serious drug use and drug sales, particularly cannabis in Canada, because of the relative ease of production and cultivation, popularity with the public, and profitability (National Intelligence Analysis, Criminal Intelligence, & Royal Canadian Mounted Police, 2009). Organized crime gangs are also involved in synthetic drug production, such as Ecstasy (MDMA) and methamphetamine and importing cocaine (Rainbow, 2010). In recent years, cocaine prices have increased as availability decreased (Rainbow, 2010). This, coupled with disputes between gangs, competition over supply and turf, and drug rips and existing debts, all contribute to gang wars.

It is because of criminal networks that traffickers gain and expand their distribution (Desroches, 2005, p. 38). Networks assist drug traffickers by allowing them

to pool their resources, both commodities and relationships, for mutual benefit. While many think that a traditional hierarchy constitutes organized crime, it is actually more beneficial to all members to have a network system (Desroches, 2005, p. 39). This does not mean that this kind of crime is “disorganized” but makes the relationships between individuals more elusive. Because intelligence analysis examines the networks of offenders, its importance expands from a particular police jurisdiction to an international concern.

Chapter 8. Transnational Organized Crime

Business

Globalization has greatly increased the amount of transnational trade of goods and services. Unfortunately, that has also increased the trade of illegal goods and services, such as sex trade workers, stolen vehicles, weapons, and drugs (Desroches, 2005, p. 39). Government controls over the flow of goods at the border have decreased (Desroches, 2005, p. 40). Specifically, the increased use of containers for transnational shipments has provided a new way for criminal enterprises to smuggle goods. False ceilings or bottoms are built into containers to create panels that allow for large quantities of drugs to be smuggled. In August 2013, Canadian Border Services Agency (CBSA) officers found 53 kilograms of cocaine and 22 kilograms of methamphetamine in a tractor-trailer at the Windsor crossing (The Canadian Press, 2013). The officers noticed inconsistencies in the front wall of the vehicle during their examination and found the drugs concealed behind the interior panels. Drugs may also be smuggled into countries by having the outward façade that they are coming from a legitimate business. For example, CBSA intercepted four kilograms of the date-rape drug ketamine dissolved in containers labeled as rosewater coming from India (Staff Metro Halifax, 2013).

Ethnicity

Ethnic networks have dominated the world of organized crime for many years. It is common for people of the same ethnicity to congregate together for many reasons, including trust, family ties, friendship, and cultural bonds (Desroches, 2005, p. 41; Williams, 1994, p. 97). Individuals involved in crime often cluster and associate based on familial ties, especially in recent migrant groups (Malm, Bichler, & Van De Walle, 2010). These networks generally show strong structural cohesion. Criminal networks that are linked through kinship are difficult to establish, because of blood relations, and difficult to disrupt, but removing key members can be effective as they are not easily replaced (Malm, Bichler, & Van De Walle, 2010). These characteristics make these groups very difficult for law enforcement to break apart. Crime networks may exploit these ties to broaden their smuggling network into other countries, therefore “treat[ing] national borders as nothing more than minor inconveniences to their criminal enterprises” (Roth, 1992 in Williams, 1994, p. 97). These ties commonly form between individuals in a source country and host countries with sale opportunities.

There is however, an emergence of hybrid gangs that have a history in the United States (Thrasher, 1927). The term “hybrid” is used to indicate gangs that are multiethnic, but we are also seeing cooperation between former rival gangs in criminal activity (Starbuck, Howell, & Lindquist, 2001). Street gangs and organized crime groups are increasingly becoming close in terms of business, such as street gangs collaborating with Mexican drug cartels (Chatterjee, 2006). Street gangs may be hired by organized crime groups to engage in violence and aggression over territory or product markets (Criminal Intelligence Service Canada, 2010). In Canada, individuals participating in the drug trade are often part of smaller organized groups, with the exception of outlaw motorcycle gangs. These groups also vary in ethnicity, contrary to research in other countries (Desroches, 2005, p. 50). It is because of the emphasis on networks, rather than formal hierarchical organization, that transnational crime groups can operate with such mobility and adaptability (Williams, 1994, p. 105).

Country Specialization

Transnational criminal organizations specialize in different operations. The cartels in Columbia specialize in drug trafficking, specifically cocaine (Williams, 1994, p. 101). Asian groups, such as the Triads in China and the yakuza in Japan have a wider range of activities, such as prostitution, extortion and fraud, in addition to drug trafficking (Williams, 1994, p. 101). The Triads generally smuggle heroin into North America in commercial containers via Bangkok and Hong Kong, onwards to Vancouver and Toronto (Williams, 1994, p. 104). The majority of heroin seizures involve Asian crime groups (Albanese, 2004). The yakuza specialize in crystal methamphetamine, most often shipping to Hawaii and the West Coast of Canada and the USA (Williams, 1994, p. 105). While it is rare that ethnic groups will collaborate with other ethnic groups, especially Asian crime groups, it will happen occasionally for specific activities (Malm, Bichler, & Nash, 2011). Recently, Asian crime groups have been found to have an exceptional number of transnational contacts from their global migration over the last few centuries (McIllwain, 1999). Asian individuals, particularly the Chinese, originate in a hierarchically organized society, whereas Western society operates more on an individual level. This hierarchy involves obligational bonds to one another in a connected network. In Europe, most of the heroin enters through Turkey using routes that are less likely to be searched because there are no customs controls for tax (Williams, 1994, p. 105). The Italian mafia has been involved in the heroin trade from Southeast Asia and the cocaine trade from South and Central America (Williams, 1994, p. 108).

Canada and the United States

As of 2007, the most common drugs being smuggled between Canada and the United States are MDMA, cocaine and marijuana (The Government of Canada & The Government of the United States, 2007). More recently, methamphetamine has become a concern.

MDMA.

From 2004 to 2007, MDMA or ecstasy seizures by US Customs and Border Patrol (CBP) increased from 1.1 million units to 5.2 million units (The Government of Canada & The Government of the United States, 2007). It was during this time that Asian trafficking groups began manufacturing large amounts of MDMA in Canada, leading to a decrease in trafficking from Belgium and the Netherlands, who used to be the primary providers. These drug trafficking organizations (DTOs) consist primarily of people of Chinese descent who use private and commercial vehicles for smuggling.

A recent trend includes the production of "designer drugs" which are not the pure chemical formula of MDMA. Instead, they have other compounds mixed in, including caffeine, ketamine, and methamphetamine. In the US, pill presses, which are used in MDMA labs, are required to be registered. However, in Canada, pill presses have no restrictions.

Cocaine.

Most of the cocaine smuggled into Canada transits through the US but originates in Colombia, Peru and Bolivia (The Government of Canada & The Government of the United States, 2007). Cocaine primarily enters Canada through British Columbia, Ontario and Quebec. From 2001 to 2003, CBSA intercepted 3.3 tons of cocaine at all ports of entry (POEs). However, from 2004 to 2006, 4.1 tons were seized, which is a 24 percent increase.

Cocaine is mostly smuggled through POEs in British Columbia and Ontario including the Windsor-Detroit crossing, Sarnia-Port Huron, and Sault Ste. Marie. In British Columbia, enforcement has been so successful that it is becoming more common to smuggle cocaine in through the Alberta border. At land borders, cocaine is most often found in hidden vehicle compartments.

Mexican DTOs control cocaine distribution in the western states, some of which is transported up through British Columbia. Asian DTOs in Canada make contacts directly with suppliers in Mexico or Central America, but they have also made contacts in the US and are involved in smuggling into Canada.

Marijuana.

Large amounts of marijuana are smuggled from British Columbia into the United States. The most common methods are using hidden compartments in passenger and commercial vehicles. British Columbian-produced marijuana has a higher street value because of its high THC content (The Government of Canada & The Government of the United States, 2007). However, 87% of all marijuana seized by US CBP in 2002 was found at the US-Mexico border (Cottam & Marenin, 2005, p. 9). In Canada, organized crime groups control the marijuana supply (The Government of Canada & The Government of the United States, 2007). Asian, specifically Vietnamese DTOs, specialize in indoor grow operations. They often work with Indo-Canadian individuals connected to the trucking industry to arrange for cross-border transportation.

In more recent years, the amount of marijuana seizures has declined (The Government of Canada & The Government of the United States, 2007). It is hypothesized that Asian drug trafficking organizations are establishing more marijuana grow operations that are operating in many US regions, such as California, the Northwest states and Northeast states. On November 6, 2012, Washington and Colorado citizens voted to legalize marijuana (Coffman & Neroulias, 2012). It will be interesting to see how this has impacted organized crime and the marijuana business.

Methamphetamine.

Canada exports large amounts of pseudoephedrine to the United States (Cottam & Marenin, 2005, p. 8). Pseudoephedrine is used to make methamphetamine in the United States. In Canada, pseudoephedrine is not a controlled substance. Cross-border smuggling of methamphetamine however, is less common (The Government of Canada & The Government of the United States, 2007). It is either produced domestically or supplied to the US from Mexico.

The fluidity of a criminal network contributes to the fluidity of smuggling operations. Intelligence and analysis is so important to border officers because of the vast variety of smuggling techniques and goods. Trends are constantly emerging and desisting that officers would be less prepared if it were not for intelligence officers. Officers are constantly analyzing the fluidity and flexibility of criminal networks to contribute to the stoppage of the international drug trade.

Chapter 9. CBSA and US CBP Cooperation

The border between the USA and Canada is approximately 8 900 kilometres long (Cottam, 2006). When the Canada – United States Free Trade Agreement came into effect (01 January 1989), many wondered how the transportation of illicit goods would be controlled with the increased liberalization of the border (Taylor, 1992). In 1980, global imports totaled USD$2 trillion and by 1990, imports totaled USD$3.5 trillion (Williams, 1994, p. 98). This increase in global trade means that customs and border patrol agencies have a much larger job. The number of containers, parcels, and people that are examined can only be increased with a greater number of officers. Unfortunately, the growth of these agencies cannot match the growth in trade. The Canada-US border is unique in that drugs are smuggled in both directions over the border as opposed to the US-Mexico border, where drugs smuggled almost exclusively into the US (Cottam & Marenin, 2005, p. 25). CBSA and US CBP work together closely to combat cross-border crime while maintaining programs that facilitate for pre-clearance and expedited crossings, such as the NEXUS program (Cottam, 2006). The two agencies share information, databases, and plan and carry out operations together. They also share the same radio frequency (Cottam & Marenin, 2005, p. 27). Specifically, there is a joint post maintained between British Columbia and Washington (Deflem, 2001). Operations Pipeline, Convoy, and Jetway were established to create joint training courses for US and Canadian law enforcement agencies (The Government of Canada & The Government of the United States, 2007, p. 30).

The Canada-United States Cross-Border Crime Forum (CBCF) was founded in 1997 and is co-chaired by the Minister of Public Safety and the US Attorney General (The Government of Canada & The Government of the United States, 2007, p. 28). The forum holds annual meetings that bring together law enforcement and different levels of government from both countries to discuss border issues. The Integrated Border Enforcement Team (IBET) started in 1997 with operations between BC and Washington and works together to intercept drugs (US Department of State, 2000 in Cottam, 2006). This team was expanded to cover the entire border (Cottam, 2006). This increasing joint action is largely in response to the war on drugs. IBETs are established along the Canada-US border and comprise of members from the US CBP, CBSA, FBI, DEA (Drug Enforcement Administration) and the RCMP (Cottam & Marenin, 2005, p. 27). These formal teams engage in information sharing on drugs and illegal immigrants.

Project North Star was a joint operation developed by Canadian and United States law enforcement in 1990 (Cottam & Marenin, 2005, p. 26). The project consists of three groups with four members from US states that border Canada representing law enforcement at state, county, municipal, and National Guard level. The groups also include an RCMP officer from each Canadian province and members of the provincial police from Ontario and Quebec (Cottam & Marenin, 2005, p. 26-27). The purpose of the project is to enhance communication, cooperation, and partnerships between the two countries (The Government of Canada & The Government of the United States, 2007, p. 28). These goals include sharing intelligence and coordinating targeting, prosecution, training and planning. In 1990, Canada and the United States signed an agreement to allow for the sharing of information for legal proceedings (Cottam & Marenin, 2005, p. 24). In 1994, another agreement was signed that allowed for any assets seized during joint investigations to be divided (Cottam & Marenin, 2005, p. 24) (see Appendix for Canada-USA joint operations).

The flow of drugs used to be from South and Central America into the United States, then into Canada. However, more drugs are being imported into Canada first from South America and Asia, which is then being trafficked to the USA (Deflem, 2001). CBSA works jointly with the RCMP, Canadian Coast Guard, and the Canadian Navy to combat this importation (Deflem, 2001).

Policy

Canada and the US have similar strategies in official policy, yet different approaches to the war on drugs. Most of the US operation focuses on enforcement while Canada “officially” focuses on treatment and prevention (Cottam, 2006). However, there was also the introduction of mandatory minimum sentences for drug offences through the Safe Streets and Communities Act. This Act amended the CDSA to allow for a judge to impose a mandatory minimum sentence if there is an aggravating factor present. The official priorities of US drug control are prevention in youth, intervention for current users, and disrupting the illegal drug market (The Government of Canada & The Government of the United States, 2007, p .31). The Canadian strategy includes preventing, treating and combatting illegal drug use and production (The Government of Canada & The Government of the United States, 2007, p. 32).

The US National Drug Control Strategy was established in 2002 and focuses prevention efforts on youth through education and community action (The Government of Canada & The Government of the United States, 2007, p. 31). There is a national

media campaign that is aimed at “unselling” drug use to youth. Current users are addressed in the strategy by having access to recovery programs that allow for treatment and services such as childcare and transportation. The last focus of the strategy is on enforcement of drug laws. By working with partner agencies and international organizations, such as CBSA, they hope to interrupt the illegal market.

Canada’s National Anti-Drug Strategy was established in 2007 and focuses on youth drug prevention through awareness and knowledge of the harmful effects of drug use (The Government of Canada & The Government of the United States, 2007, p. 32). There are additional resources provided to First Nations and Inuit populations to support treatment and rehabilitation programs. In terms of enforcement, the RCMP has drug-enforcement teams across the country that focus on certain aspects, such as the marijuana enforcement team.

Screening

Screening is an essential part of the duties of a CBSA officer (Canada Border Services Agency, 2007). CBSA officers use analysis performed by its Immigration Intelligence Network, Citizenship and Immigration Canada, and national and international law enforcement agencies to assist in the screening process (Canada Border Services Agency, 2007). All individuals who cross the border are screened at a basic level first. Further indicators or intelligence provided by other agencies determine if a more intense screening is necessary. The NEXUS program involves the pre-screening of individuals by performing background checks. The individuals who are accepted into NEXUS are deemed to be lower risk and are therefore subject to a less intensive screening process each time they cross the border. This allows border officials to focus their attention on individuals who cross the border less frequently (Ackleson, 2005, p. 144). Border agencies also use biometric technology to increase security. The scanning of unique physical characteristics is used at the border to confirm an individual identity. This works to combat identity theft (Ackleson, 2005, p. 147). Enrollment in the NEXUS program includes fingerprint and iris scanning technology. Border agencies have developed information systems to collect and search data on passenger crossing habits (Ackleson, 2005, p. 148). These databases also include any details on previous enforcement used by border officials, as well as criminal history.

Chapter 10. CBSA and Canadian Police Agencies

CBSA frequently participates in operations with the RCMP and provincial and city police agencies. Sometimes CBSA officers come across items that do not fall within the Customs Act, which means that officers are unable to carry out an enforcement action alone. However, these items may indicate the commission of a crime, such as blank credit cards. In these cases, CBSA officers can refer the items to the RCMP Federal Intake Division who forwards the details to local law enforcement agencies. These agencies then decide if they would like to take further action on the individual by seizing the goods and perhaps following up with a charge.

Project INFINITY was a three-year operation that involved several police agencies, including the Ontario Provincial Police's Organized Crime Bureau, the Toronto Police drug squad's Major Projects Section and the CBSA (The Government of Canada & The Government of the United States, 2007). Over 24 kilograms of heroin and quantities of opium, cocaine, ecstasy and crystal meth worth $78 million were seized. These drugs were all being shipped in from different countries using unique concealment methods. 15 kilograms of heroin was laced into carpet fibers coming from Pakistan. Another 5 kilograms of heroin were hidden in a crate of crockery coming from Pakistan. 1.45 kilograms of heroin was found pressed between two silver plates that were made to look like one plate. Cocaine was concealed in a wooden clock coming from Guatemala and 160.5 kilograms of ephedrine was concealed in vanilla powder coming from India. The project resulted in the arrests of eleven Ontario residents.

Looking towards the future, it is important to consider emerging trends. Cross-border smuggling of MDMA from Canada into the United States is likely to continue, with Asian organized crime groups being the primary smugglers. CBSA will continue to pay close attention to travellers and packages from the United States for cocaine. Most importantly, CBSA and US CBP need to continue to form connections through communication, intelligence sharing, and joint operations. More funding and increased personnel to work on these operations would be beneficial. One side alone cannot dismantle a large organized crime network. The success of joint operations shows both governments what can be accomplished when agencies from both countries work together to combat cross-border drug smuggling.

The Real Border Security: My Experience at CBSA

I worked for Canada Border Services Agency for a period of eight months as a Student Border Services Officer in the Metro District in the Pacific Region. Specifically, I worked at the Vancouver International Mail Centre and Cruise Ship Operations. My job description while intense, did not accurately describe the vast multitude of people, objects, and laws I would encounter on the job. There was no such thing as a "typical" day, which is why I loved the experience. I was able to apply some concepts and theories that I had learned in the classroom, but most of my job knowledge came from first hand experience.

Cruise Ship Operations

The cruise season begins at Canada Place in downtown Vancouver in April and ends at the end of September. Each day, thousands of international passengers disembark their ships, most of which originate in Alaska. While the risk of this port has been ranked low, officers remain vigilant and are eager to discover illegal contraband on both passengers and crew. Each individual is screened prior to their arrival in Canada to determine if there have been any prior run-ins with customs or criminal convictions that may make them inadmissible to Canada. Once the screening of each ship has been completed, the individuals whom officers want to examine more thoroughly are placed on a list that is given to the cruise ship. These individuals are held back from the regular exit passengers and escorted off the ship into the secondary examination area by customs officers. Individuals who do not "hit" on the system still proceed through the primary customs area, where I, as a student, spent the majority of the summer. Individuals fill out their E-311 card, which contains their demographic information as well as the mandatory questions that must be asked of all people seeking entry to Canada (Canada Border Services Agency, 2012). The questions include:

I/We are bringing into Canada:

a) Firearms or other weapons.
b) Commercial goods, whether or not for resale.
c) Meat, dairy, fruits, vegetables, seeds, nuts, plans, flowers, soil, wood, birds, insects.
d) Currency over CAN $10 000.

I/We have unaccompanied goods.

I/We have visited a farm/going to a farm in Canada.

The purpose of the questions is to determine the admissibility of people and goods seeking entry into Canada. While many travellers may be hesitant to tell an officer if that they have any of the goods listed above, honesty is always the best policy. Border officers are trained to analyze people's behaviours and mannerisms for inconsistencies. If a traveller does possess any of the items on the E-311, the officers will ask further questions about the item to determine if it is admissible. For example, some firearms may be admissible to Canada if they are regulated and the traveller has followed the proper procedure by having the paperwork necessary to allow it to come into Canada. Fruits and vegetables that are not grown in Canada are allowed to enter, but fruits such as apples and peaches are inadmissible as they are grown here and the entry of a parasite may be detrimental to that economy. The purpose for the currency question is to determine if the money is proceeds of crime. The traveller will simply need to provide a legitimate explanation for carrying that amount of cash and officers must count the currency and fill out a form for the traveller to carry upon entry into another country.

As an officer in the primary customs enforcement area, it is my job to review these questions with the travellers, as well as any other immediate concerns I may have. If I would like for the traveller to be further examined, I send them into the secondary enforcement area. In the secondary enforcement area, officers are available to give a more thorough examination of the traveller, including x-raying or searching their luggage. It is in the secondary enforcement area that the drug identification tools are used.

Border officers have several tools available to them for detecting narcotics. The first is called the IONSCAN or ion scanner. This machine detects for trace amounts of various narcotics. The officer uses a piece of cloth to swipe items that are used solely by the traveller they are interested in. The reason for this is that trace drug amounts are excreted through an individual's sweat. Some items that are commonly swiped include watches, eyeglasses, hat brims, and cell phones. Items such as credit cards and cash are not ideal to use for the ion scanner. These items pass through the hands of many people and make it much for difficult to trace the narcotics back to a specific individual. Once the item is swiped and inserted into the ion scanner, the scanner either gives a positive or negative reading for narcotics. If the reading is positive, the scanner will also say which narcotic is present. While a positive reading on the ion scanner is not absolute, it is cause for suspicion and the officer will generally conduct a more thorough search and questioning of the traveller.

Officers will inform the traveller that what they do on their own time concerning narcotics is their own business and is not a concern for border officers. However, the illegal transportation (smuggling) of narcotics across international borders is of huge concern. Even if the traveller can provide the officer with an acceptable reason for why they are having a positive reading for narcotics, the officer will still conduct a thorough search of the individual's baggage for narcotics. If the search is negative and the officer is still not satisfied that the traveller is not in possession of narcotics, a search of the person may be conducted to determine if the individual is "body packing" or concealing drugs under their clothing. This is done in a closed, secure room for privacy with two officers present that are of the same sex as the individual being searched. One officer conducts the search while the other records notes of the search, noting positive or negative findings for each part of the search. If the officer believes the individual has ingested drugs, that person can be held until the narcotics pass through their system. In my experience, I received several positive hits from the ion scanner for narcotics on cruise ship passengers and crew. However, upon closer search of the individuals and their baggage, no narcotics were identified. I was satisfied with the search that the individuals were not carrying narcotics on their person.

Another narcotics detection tool that border officers use is called the NIK test. NIK stands for Narcotics Identification Kit. NIK tests are used when officers encounter a substance that they suspect to be a narcotic. A small sample of the substance is placed in a heavy-duty, plastic, flexible pouch that contains glass ampoules. Once the pouch is sealed, the ampoules are broken one by one and vigorously agitated for thirty seconds. The suspected narcotic and ampoule liquid mix and turn a specific colour to indicate a positive match. The suspected narcotic is still sent to a lab in Ottawa for conclusive testing.

The other aspect to working at cruise ship operations involves charging Canadian citizens duty and tax on the purchases they have made abroad. Part of our duty as officers is to protect and support the Canadian economy. The limit for Canadians returning to Canada after being away for forty-eight hours or more is $800 in goods and merchandise. Any amount over that exemption is subject to duty and tax at the officer's discretion. Each port has what is referred to as "pyro", which is a discretionary limit above the stated $800 rule. If travellers honestly declare above $800, the officer may look to their port's pyro to determine if the traveller will pay duty and tax. This limit is established in "consideration of the cost to CBSA of processing a traveller through the

collection process" (Beeby, 2014). Having a higher pyro limit saves times for officers in the secondary examination area that allows them to focus on enforcement priorities.

The second port that I had the opportunity to work at was the Vancouver International Mail Centre (VIMC) that is one of three international centres in Canada. The other two are located in Toronto and Montreal. Any mail or packages that are being imported into Canada are screened through one of the three centres according to their country of origin. For example, in Vancouver, we receive all the mail that originates in Asian countries (China, Japan, Korea, Thailand, Singapore etc.), as well as Australia, the Netherlands, the United Kingdom, and select states in the United States. This allows for border officers in each of the three centres to be more familiar with mail originating in certain parts of the world. For example, the cost of drugs in Japan or Australia relative to Canada are much more expensive, meaning it is less likely that we will see someone try to import drugs into Canada from either of those countries. On the other hand, steroids are much cheaper in China and Thailand, so we tend to see large quantities imported into Canada. Weapons are also commonly imported from China into Canada, such as stun guns and brass knuckles, both of which are prohibited. Working at VIMC allowed me to become somewhat specialized in detecting these common illegal substances.

The job of Border Services Officers (BSOs) in the postal mode is to assess goods coming into Canada. Every piece of mail must have a completed customs declaration form attached to it, stating the origin and description of the goods, as well as their value. CBSA works closely with Canada Post to process these goods in a timely manner. A BSO inspects each piece of mail that is imported, although to do this efficiently means risk assessments need to be made. Mail from certain countries is deemed more high risk than mail from other countries and therefore, is inspected more closely. The highest risk goods are inspected using x-ray technology, while lower risk mail may be visually inspected. BSOs look at many different parts of a parcel before deciding if it is admissible into Canada. We look at the importer, exporter, country of origin, the declaration, and if the declaration appears to match the contents of the package. Some officers physically pick up every package to assess the weight, sound when the goods are moved around, and potentially smell the contents to ensure they match the declaration. If the officer is satisfied that the contents match the declaration, they decide if it contains dutiable or taxable goods. If the officer is not satisfied, they may open the parcel to verify the contents. The goods may then require further inspection by another agency before it can continue into Canada.

Unfortunately for law enforcement, individuals who are importing and exporting illegal substances are constantly changing their shipping methods and tactics. It is imperative that colleagues assist each other so everyone is aware of new techniques that are being used. Usually the officer who intercepts the illegal contraband will show other officers that they are working with at the time. The officers whom I worked with at VIMC were especially good at this, as they knew that I was a student and was very curious and eager to learn. I witnessed many interceptions by other officers and even assisted by taking photos of the process. The most common method of information sharing is through electronic communication. E-mail alerts are sent out regarding the details of the interception, including photos of the method of concealment. Exporters will commonly send multiple shipments with the same concealment method in hopes that some of the parcels will get through law enforcement.

Intelligence Section

There are two divisions within CBSA that help BSOs in all capacities, including passenger and postal modes. The first is the intelligence division. The main purpose of the intelligence division is to provide information to all ports of entry after the planning, collection, analysis, and dissemination of intelligence. This follows the general principles of the intelligence cycle as reviewed previously. Generally, this involves intelligence regarding specific operations or targets.

CBSA Intelligence Programs

One program that intelligence assists in the operation of is the Advance Passenger Information or Passenger Name Record program. This program allows for officers to “perform a risk assessment of air travellers and crew as they are en route to Canada” (Canada Border Services Agency, 2013). It is Canadian law that all commercial air carriers provide CBSA with basic traveller data (Canada Border Services Agency, 2013a). This includes their name, date of birth, gender, citizenship, and travel document data. Travellers who have previous links to serious crimes, such as terrorism or transnational crimes such as drug smuggling may be subject to closer examination. CBSA has their own databases that record all previous interactions between an individual and CBSA. CBSA can also request information from USCBP. Lastly, CBSA officers have access to CPIC to search for travel restrictions on individuals, or search for stolen property or vehicles (Canadian Police Information Centre, 2012). In airport mode, passports are presented and scanned, but legitimate travellers are more effectively facilitated (Canada Border Services Agency, 2013a). We facilitated a similar program at

cruise ship operations in Vancouver this past summer, which I was lucky enough to operate one day. Each cruise ship provides CBSA with an entire passenger and crew manifest before they dock in port. This allows CBSA to perform a risk assessment of the vessel. The risk assessment involves performing a search through Canadian databases for all cruise passengers to see if they had any previous enforcement action performed against them by CBSA. Performing an advanced screening on cruise passengers also allows for a more expedited customs clearing for passengers as their passports are not scanned upon entry into Canada. Cruise ship operations, in general, are considered a more low risk port of entry, which allows us to perform some of our own intelligence programs. It was a great experience for me to be able to perform the advanced searches as my previous experience was in intelligence analysis at the Royal Canadian Mounted Police.

Another major intelligence operation is the National Targeting Centre (NTC), an around-the-clock operation out of Ottawa. The NTC not only identifies and assesses high-risk people, but also goods, before they enter Canada (Canada Border Services Agency, 2013b). The NTC uses a variety of sources to make these assessments, including current intelligence, resultant enforcement actions, and other indications to identify threats. Once a high-risk person or good has been identified by the NTC, CBSA officers are notified in the most timely and secure manner (Canada Border Services Agency, 2013b). This method depends on how high a risk the person or good poses and the time frame CBSA has to intercept them. The NTC also performs the Advance Passenger Information screening on air travellers. According to CBSA, 400 to 500 air travellers are identified as high risk out of 70 000 passengers arriving in Canada on an average day (Canada Border Services Agency, 2013b). The NTC also works in conjunction with US CBP by sharing targeted individuals and risk assessments. The NTC also screens all cargo entering Canada, both marine and air. Cargo information is provided to the NTC before arrival and anything identified as high-risk is referred for examination upon entry into Canada. Risk is determined by country of origin, the importer, exporter, type of goods being transported, current intelligence, and previous resultant seizures. While I personally did not have contact with anyone at the NTC, I know they were working in the background of every operation that I worked at.

Investigations Section

While the Intelligence Section operates mainly before people and goods enter Canada, the Criminal Investigations Program (CIP) operates after inadmissible people

and goods arrive in Canada by taking proper enforcement action. This helps ensure the "health, safety, security and prosperity of Canada and its citizens" (Canada Border Services Agency, 2011). The CIP most commonly enforces the Immigration and Refugee Protection Act (IRPA) and the Customs Act. However, the CIP enforces a wide variety of Canadian Laws, including the Export and Import Permits Act, the Special Import Measures Act, the Cultural Property Import and Export Act, the Health of Animals Act, and the Plant Protection Act (Canada Border Services Agency, 2011). Under IRPA, people are frequently pursued for human smuggling, international student or worker fraud, and marriage fraud (Canada Border Services Agency, 2011). Under the Customs Act, the most common offences are "illegal importation or exportation of controlled, regulated or prohibited goods (e.g. weapons, contraband tobacco, etc.)" and "evading the payment of duties and taxes on goods being imported" (Canada Border Services Agency, 2011). Other offences that are enforced involve the illegal importation of food, plants and animals.

I had the opportunity to enforce many pieces of legislation in my time at both CSO and VIMC. Enforcement is not merely the responsibility of investigations officers, but it is also enabled on the front line. A BSO has the power to enforce these pieces of legislation by seizing the illegal goods. For example, at CSO, BSOs enforce IRPA by checking travellers' passports. Each morning, officers board the cruise ships and examine the passports of all individuals who are citizens of countries that require a visa to enter Canada. I had the opportunity to board on a number of occasions. If the traveller has a valid visa in their passport, we use our individual CBSA port of entry stamps to allow them to enter the country. Every crewmember that leaves the ship at the end of their contract is also examined. Each of their passports is scanned and the traveller is examined to ensure that they will not remain in Canada permanently. If we are satisfied that they will leave the country, we use our CBSA stamp and indicate that they are only issued temporary entry into Canada for the purpose of going back to their home country. This visa is only valid for 72 hours. At VIMC, IRPA is enforced in a more indirect way. Any immigration documents that are not being shipped to an immigration office are examined for authenticity to determine authenticity. It is not uncommon for false documents to be delivered through the postal system to facilitate the stay of illegal immigrants.

I have also enforced Health Canada legislation. This usually involved closely examining any medical devices or pills that are imported. The most common piece of

legislation that we refer to when we are deciding if a good is referable to Health Canada is the Controlled Drug and Substances Act (CDSA). If there is an ingredient that is on the CDSA, BSOs are able to seize that good. If we are unsure, we can either send a sample of the good for a lab sample or refer it to Health Canada. They will decide if the good is admissible. Medical products that require a prescription in Canada are the most common good that I referred to Health Canada, especially erectile dysfunction pills. Health Canada is also responsible for the Canada Consumer Product Safety Act that protects the public by addressing the dangers of products. This includes cosmetics, products that contain lead, pesticides and asbestos, as well as products that need to have certain safety features in place, such as cribs and child car seats (Health Canada, 2013).

BSOs also refer to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES ensures that the international trade of wildlife does not threaten their chance at survival. In the postal stream, we see many different kinds of animal and plant products. This could be as far removed as an ingredient in herbal medication or a taxidermied endangered alligator. There are several CITES officials who come to VIMC several times a week to examine the goods that BSOs have referred to them. It is the CITES official who makes the final determination on the admissibility of those goods.

The Canadian Food Inspection Agency (CFIA) determines what food, plant, and animal products are allowed to enter Canada. Travellers are required to declare any of these items to a BSO at the port of entry. Because pests and disease exist in a dynamic state, the requirements are always changing (Canadian Food Inspection Agency, 2014). At CSO, we constantly took fresh apples from travellers. In British Columbia, travellers are not allowed to bring fresh apples or stone fruit from other countries (Canadian Food Inspection Agency, 2014). This is to ensure the stability and prosperity of the orchards in the Okanagan. Another common item are items made of wood. Travellers coming to Vancouver from Alaska commonly bring back wooden carvings. These are allowed into Canada as long as they do not have any bark or insects on them (Canadian Food Inspection Agency, 2014). On more than one occasion, travellers have brought wooden sticks or pieces of wood from lumberjack shows into Canada that had both bark and insects on them. At VIMC, we often see food products coming in from other parts of the world. There are some that we know from experience are allowed or not allowed, but all other are referred to CFIA officers who inspect the goods further. Travellers can consult

the Automated Import Reference System (AIRS) to see the import requirements for different goods (Canadian Food Inspection Agency, 2014).

While investigations are generally launched after border officers referred their resultant examinations to the investigations section for further charges, investigations may be launched after a tip is received from the public, other government departments, and local and provincial police agencies (Canada Border Services Agency, 2011). The investigative process involves interviewing all parties involved in the situation, including those who referred the case. Investigations also review all information located in CBSA and law enforcement databases concerning the people involved. Depending on the type and severity of the offence, surveillance and search warrants may be carried out (Canada Border Services Agency, 2011). If sufficient evidence is found through these methods, CBSA works with the Public Prosecution Service of Canada to lay charges (Canada Border Services Agency, 2011). Some factors that are considered before deciding to prosecute include the impact of the offence on the public, and deterrence. Immigration cases may be heard before the Immigration and Refugee Board, which may result in removing a violator of an immigration offence to their home country.

Intelligence and investigations are crucial to the protection of the Canadian border. The main focus of the intelligence division is risk assessment, which is determined through crime analysis. Officers explore the trends of goods that are being smuggled into the country, as well as the methods that are being used as far as concealment and routing. Threats and vulnerabilities to the border are examined in conjunction with other law enforcement agencies and are used to determine the focus of targeting operations. CBSA can plan more effective tactical operations by incorporating the powers of GIS into the planning stages to give the operations a geographic focus. Intelligence analysis uses GIS and mapping to show the relationships between individuals in a crime network and with such large, international networks operating in the drug trade, the use of GIS and mapping is essential in aiding officers. Because individuals spend their time in few places, GIS can be used to track these so CBSA and other law enforcement agencies know where to focus their resources. In the modern underground crime market, international network complexity adds a new layer of concern for law enforcement, and particularly, border security agencies. All available analysis tools should be used in conjunction with liaising with other law enforcement agencies to combat drug smuggling.

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Appendix.

Canada-US Joint Operations and Projects

Operation Brain Drain/Project Diversion lasted 17 months in 2004 and 2005 and targeted Canadian distributors of ephedrine and US-based methamphetamine manufacturers and distributors (The Government of Canada & The Government of the United States, 2007). The results of the Operation include 90 arrests, and seizures of methamphetamine and methamphetamine solution, ephedrine powder and pills, cocaine, precursor chemicals, weapons, vehicles, meth labs, and CAD$3.5 million.

Project Pigeon lasted 2 years in 2005 and 2006 and targeted a marijuana smuggling ring operating in Ontario and transporting to Michigan (The Government of Canada & The Government of the United States, 2007). The operators of two trucking firms were arrested and 2 200 kilograms of marijuana and USD$1.3 million were seized, as well as diamonds and stolen goods.

In 2005 and 2006, Operation Hat Trick/Project Jaloux resulted in the arrests of 31 individuals and seizure of CAD$3.5 million in marijuana (The Government of Canada & The Government of the United States, 2007). The operation was active in New Brunswick, Quebec, and Maine.

Operation Sweet Tooth/Project O'Skillet targeted MDMA and marijuana traffickers (The Government of Canada & The Government of the United States, 2007). 291 individuals were arrested and seizures included almost one million MDMA tablets, marijuana, and USD$7.75 million in assets.

In 2006 and 2007, an investigation named Frozen Timber targeted helicopter drug drop-offs in BC and Washington (The Government of Canada & The Government of the United States, 2007). The investigation resulted in seizures of marijuana, cocaine, three aircraft, and USD$1.5 million. 46 people were arrested.

In 2006 and 2007, Operation Triple Play/Project O'Slider targeted Vietnamese organizations involved in MDMA and marijuana trafficking (The Government of Canada & The Government of the United States, 2007). 20 individuals were arrested and MDMA, firearms, and US currency were seized.