

Behavioral Sciences of Terrorism and Political Aggression

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/riart20>

Cross-border terror networks: a social network analysis of the Canada-US border

Christian Leuprecht^a, Todd Hataley^b & David B. Skillicorn^c

^a Department of Political Science, Royal Military College of Canada, Kingston, Ontario, Canada

^b Centre for International and Defence Policy, Queen's University, Kingston, Ontario, Canada

^c School of Computing, Queen's University, Kingston, Ontario, Canada

Version of record first published: 15 Jan 2013.

To cite this article: Christian Leuprecht, Todd Hataley & David B. Skillicorn (2013): Cross-border terror networks: a social network analysis of the Canada-US border, Behavioral Sciences of Terrorism and Political Aggression, DOI:10.1080/19434472.2012.760105

To link to this article: <http://dx.doi.org/10.1080/19434472.2012.760105>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Cross-border terror networks: a social network analysis of the Canada–US border

Christian Leuprecht^{a*}, Todd Hataley^b and David B. Skillicorn^c

^aDepartment of Political Science, Royal Military College of Canada, Kingston, Ontario, Canada; ^bCentre for International and Defence Policy, Queen's University, Kingston, Ontario, Canada; ^cSchool of Computing, Queen's University, Kingston, Ontario, Canada

(Received 20 June 2012; final version received 14 December 2012)

American rhetoric has repeatedly painted Canada as a conduit for terrorists to enter the USA. But what actually happens at Canada's borders? This article analyses open-source, cross-sectional data on Canadians convicted of terrorism offences between 1999 and 2011. It applies social network analysis (SNA) – investigating stochastic networks by means of the structure of human groups using pairwise links among their members – to (1) identify the drivers, nature and direction of Canada–US extremist cross-border traffic; (2) generate hypotheses from a limited data set that can be subjected to further empirical scrutiny with the aim of modelling cross-border extremist networks more generally; and (3) assess the risk they pose by measuring the extent to which such networks increase or reduce marginal costs. SNA of nine cases involving 14 subjects between 1997 and 2011 finds no systematic terrorist threat directed at the USA emanating from Canada. That finding is reinforced by the simple structure of cross-border networks. Terrorist traffic actually runs both ways, exploits countervailing transaction costs in the form of markets of opportunity on either side of the border, and much of the effort is in support of terrorist activity outside of North America. Most subjects crossed the Canada–US border legally at ports of entry, suggesting that enforcement resources are better spent on flows than controls at the actual border.

Keywords: social network analysis; terrorism; borders; Canada; USA

Canada and the USA form one of the world's oldest and, arguably, the world's closest bilateral security community. Nonetheless, the “New Fenianism” that has pervaded US discourse since 9/11 worries that “the expansive commercial cross-border networks and routes (both legal and illegal) can now be exploited to smuggle terrorists and weapons of mass destruction into the United States” (Andreas, 2005, p. 460; Salter & Piché, 2011). American elites, including journalists, a Senator and a Secretary of the Department of Homeland Security and the former director of MIT's Security Studies Program have alleged as much (Sapolsky, 2005, p. 31). But what *actually* happens across Canada's border with the USA? Why do terrorists cross borders to begin with? And what can be done to deter them from doing so? This exploratory study investigates the marginal costs of the Canada–US border for politically motivated violent extremism. In effect, it models individuals, places and objects as nodes of a graph, and places links between nodes to represent relations among them. This approach to

*Corresponding author. Email: christian.leuprecht@rmc.ca

exploring the structure of groups in human society is known as social network analysis (SNA). This article applies SNA to (1) measure the drivers, nature and direction of cross-border terrorist traffic between Canada and the USA, (2) generate hypotheses about social networks, including accounting for variation among cross-border terrorist networks across the Canada–US border, the reasons behind the networks, how they are being used and accessed and whether policy differences between Canada and the USA act as network enablers and (3) measure the risk that such networks present as a function of the marginal costs associated with borders.

The exploratory sample in this article is based on cases that meet four conditions. First, individuals included in the sample are all Canadians. Second, they must have all been convicted in either a Canadian or an American court for terrorism-related activity between 1997 and 2011. Third, their deviant actions were realized by way of networks. Fourth, these networks breached Canada's international border with the USA. The result is a sample of nine cases, but the number of subjects is 14 because three cases implicated more than one individual. This is an exploratory sample that will grow over time. Additional cases are currently before the courts, other cases remain unsolved, and yet others meet the elements of a terrorism-related offence in theory but in practice the criminal charges laid in the case do not yet reflect a terrorist dimension (cf. LaFree, 2012).

Notwithstanding the methodological limitations of a small sample, some unexpected and distinct patterns emerge that facilitate subsequent hypothesis generation. Instead of testing hypotheses, patterns from studies that only have a small n on which to draw are best used to generate hypotheses. These can subsequently be subjected to further empirical testing elsewhere with the ultimate aim of developing a model that is able to capture the dynamics of cross-border extremist networks. Just how important a feature of terrorism are cross-border networks? Are these two- or multi-person networks? How are they formed? And what is their purpose? Answers to these questions will go some way toward ascertaining the best means to contain and disrupt both the genesis and diffusion of cross-border networks that facilitate terrorist ends. Ultimately, the article is asking whether and how SNA may be useful in identifying vulnerabilities and developing strategies to counter extremist networks that span international borders.

On the one hand, especially in the post-9/11 period, the border has become a zone for sorting legitimate from illegitimate movement. Newman (2001) articulates this sorting function as a fundamental character of borders that defines "the nature of exclusion and inclusion" between and within states. The enforcement of inclusion and exclusion generally falls to security agencies such as, in the case of Canada and the USA, the Royal Canadian Mounted Police, Canada Border Services Agency, US Border Patrol and Customs and Border Enforcement. On the other hand, the border demarcates different laws and cultures between Canada and the USA which lend themselves to exploitation by criminal organizations and violent extremist groups. Research on Mexican drug cartels, conducted by Payan (2006) demonstrates the degree to which legitimate cross-border movement can be exploited by organized crime groups for nefarious purposes. The mere existence of a border can thus offer incentives to cross (Donnan & Wilson, 1999). That is, by virtue of creating markets of opportunity, the border can affect marginal costs and, consequently, the strategic behaviour of terrorists (Siqueira & Sandler, 2010). However, Lösch (1954) and Helliwell (1998, 2002) point out that borders actually increase marginal costs for legitimate cross-border trade and traffic. For example, Moens and Gabler (2012) illustrate the financial costs for industry and taxpayers

associated with increased security along the Canada–US border. The article takes up this debate by drawing on SNA to ascertain why terrorists construct cross-border networks. In other words, it examines the role of networks *in* and increasingly *as* organizational structures that are “temporary, dynamic, emergent, adaptive, entrepreneurial and flexible” (Acharya, 2009, p. 27; Stohl & Stohl, 2007).

Networks are widely recognized as the dominant social structure of extremist groups (Buchanan, 2002; Featherstone, Phillips, & Waters, 2007; Magouirk, Atran, & Sageman, 2008) insofar as they link actors who are working toward common goals (Powell, 1990). They make it possible for terrorists to overcome collective-action problems arising out of complexity and the uneven distribution of assets that they need to carry out attacks. In the “global Salafi jihad”, “the distribution of assets seriously affects its mission against the United States” (Sageman, 2004, p. 145). That is because networks are used by terrorist groups to recruit, train and prepare for an attack (Matthew & Shaumbaugh, 2005). Networks are a means to compensate for inadequate resources, identity, culture, emotions, elite access, ideological support and recruits (Eilstrup-Sangiovanni & Jones, 2008; Giraldo & Trinkunas, 2007; Gunning, 2008, 2009). Moreover, networks “provide flexibility, adaptability, deniability, multidimensionality and the capacity to do things at a distance, often through surrogates” (Sheffer, 2005). But how can one study networks that span borders when such networks are illicit and covert? These networks are not necessarily maleficent *per se*: they are merely a means to an illegal end. Most of the subjects in this study, for instance, crossed the Canada–US border perfectly legally – but at some point harnessed a network to engage in illegal activity, such as returning back to Canada with a firearm that was procured legally in the USA, but that is illegal in Canada and was not declared to the Canada Border Services Agency upon re-entry. That makes the collection of data easier: the subjects in question are not particularly concerned about covering their movements and interactions, merely the illegal activity involved. At the same time, such connections exogenous to the cell for purposes of procuring resources and funds also render networks more prone to detection (Acharya, 2009).

Still, one is up against considerable constraints when collecting data on terrorist networks, especially those that span multiple jurisdictions. These constraints have implications for the application of SNA. In this study, cross-sectional data points were insufficient to employ conventional network metrics reliably. Edges of the graph are missing because certain information is difficult or impossible to capture. As a result, the application of SNA to cross-border terror networks in this article relies more on concepts and visualization of stochastic networks than on quantitative measures. Nonetheless, the results certainly warrant such application of SNA, however unconventional it may be.

Many insights gleaned about terrorist networks, their genesis, purpose and the way they work, stem from interviews with incarcerated and former terrorists or their associates (e.g. Bower-Bell, 2000; Bruce, 1992; Coogan, 1995; Della Porta, 1995; Fair, 2008; Hegghammer, 2006; Jamieson, 1989; Taylor, 1988; White, 1993). Methodologically, however, such evidence cannot stand on its own (Horgan, 2012). First, interviewees are subject to sampling bias and, consequently, information gleaned from interviews subject to omitted variables and less-robust results, since convicted terrorist are difficult to access and most refuse to be interviewed (LaFree, 2012). Second, we cannot just take the claims of interview subjects at face value without corroborating evidence. Third, *ex post facto* interviews are prone to the psychological phenomenon of hindsight bias: an interviewee’s memory is susceptible to distortion when asked to recollect

and reconstruct content. They may also intend to deceive. Fourth, interviews may suffer from the Hawthorne effect: people change their answers by virtue of the fact that they know that they are being studied. Fifth, interview results are subject to coding bias. Sixth, information gained through interviews is subject to a priming effect that is inherent in the way questions are posed and the order in which they are posed.

Victimization surveys and Uniform Crime Reporting data were never designed to capture terrorism-related offences; offender reports are difficult to access and data held by intelligence services are hard to come by (Chermak, Freilich, Parkin, & Lynch, 2011). In the light of these methodological challenges, we opted instead for an approach that relies on readily replicable data. The first section of the article lays out this methodological toolkit, and how it is used in this article to overcome the challenge of collecting data on covert networks. The second section presents and analyses the data. The third section draws on these findings to discuss the utility of SNA for the purpose of studying cross-border extremist networks. The conclusion provides an assessment of the drivers, nature and direction of Canada–US extremist traffic in the context of the contribution SNA stands to make to the study of violent political extremism.

Method

With the same general approach as the Homegrown Terrorism Cases project at Syracuse University, our scope conditions are limited to (1) Canadians – defined as born or naturalized citizens – (2) who have been convicted of terrorist or terrorist-related offences¹ in Canada or the USA.² However, our project does not discriminate by motivation, nor do we include cases involving citizens who travelled overseas to join a terrorist group but were never actually convicted for that activity. Our data set excludes Canadians merely suspected of terrorism or violent extremism, individuals killed in terrorist-related operations,³ or Americans who travel to Canada for extremist support or action.⁴ Our research is agnostic as to the type of terrorism, provided that (3) there is clear evidence that the purpose for crossing the border was motivated by violent extremism (as opposed to, say, courtship as in the case of American extremist Omar Hammami). We mined open sources on convictions that fall within this scope. Sources include newspapers, academic research, reports by courts, think tanks, governments and NGOs, and the Internet (*caveat emptor*). Our fieldwork included collecting data relative to precursor crimes associated with terrorists' conduct in advance of a terrorist incident and, once they were indicted, collecting additional data on their antecedent behaviour. This makes it possible to discern temporal and geospatial patterns.

Second, we compiled and coded court-case records for each individual. This approach is not without its limitations: only in common-law democracies do such documents become a matter of public record once a trial has wrapped up. This is salient for our purposes because much of the information on networks is contained in police statements, investigative reports and court testimony. For cases tried in Canada, some information is available through LexisNexis, the Canadian Legal Information Institute and complementary court documentation is available through the court of jurisdiction and the Criminal Prosecution Service of Canada.⁵ For Canadians tried in the USA or other jurisdictions, we searched US indictments, complaints, affidavits and sentencing hearings through Public Access to Court Electronic Records (PACER) which provides USA Federal Court records, through the Nine Eleven Finding Answers (NEFA) Foundation, and The Investigative Project on Terrorism.⁶ Limiting the scope to individuals already

convicted of terrorist or terrorist-related offences minimizes the risk of selection bias. The elements of the offence are unambiguous and the conviction by a court provides a solid basis for assuming commission of the offence. Moreover, many cases involve multiple trials in different jurisdictions, thus ensuring that the same evidence is tested repeatedly, often in different countries. Subsequent research will endeavour to complement these exploratory observations with interviews and border-crossing data.

Observations

Among the total number of Canadians convicted for their complicity in terrorist activity dating back as early as 1993 and subsequently convicted thereof in Canada or abroad between 1997 and 2011,⁷ the subset of those who networked strategically across the Canada–US border is $n = 14$. We intentionally did not limit the scope conditions to Canadian territory since we are interested not just in Canadians but also where Canadians are committing terrorist offences. This article's exploratory findings count 9 cases with 14 Canadians with a Canada–US cross-border dimension that have been convicted of terrorist activities:

- (1) In 1993, the Israeli government granted Gazi Ibrahim Abu *Mezer* an exit visa that he used to travel to Canada where he claimed refugee status [National Consortium for the Study of Terrorism and Responses to Terrorism (Shoemaker, 2012)]. Subsequently, Mezer made three attempts to cross into the USA along the British Columbia's border with Washington with the intent of perpetrating acts of terrorism. The first two attempts occurred 5 days apart in June 1996. Both attempts were between ports of entry, and both times he was returned to Canada (Shoemaker, 2012). On his third attempt in January 1997, Mezer was intercepted at a bus station 25 miles behind the American border in Bellingham, WA (Shoemaker, 2012). He was released into the USA on bond, subsequently evading immigration officials and attempting to claim political asylum (Emerson, 2000; Shoemaker, 2012). Mezer was occupying an apartment in New York City (NYC) along with two other individuals when he was arrested on 31 July 1997. One of these co-occupants had alerted authorities that Mezer was constructing pipe bombs and planning to detonate them in the NYC subway system (Emerson, 2000). Mezer later claimed that he wanted to punish America for its support of Israel by killing as many Jewish people as possible with his homemade explosives (Macko, 1997; Shoemaker, 2012). He was convicted of four charges including two counts of conspiracy to use a weapon of mass destruction and sentenced to life in prison (United States District Court Eastern District of New York, 1998). Mezer has claimed to be associated with Hamas; Hamas distanced itself from that claim.
- (2) Ahmed Ressay was arrested on 14 December 1999 for planning to bomb the Los Angeles International Airport. In 2005, Ressay was sentenced to 22 years in jail, after providing useful intelligence to US law enforcement. However, his sentence has since been revoked; Ressay is due to be re-sentenced. The Millennium Plot, as it became known, crossed a number of international jurisdictions during its training, planning and execution phases, including the Canada-US border where Ressay was arrested while using fake identification to cross. Although a number of individuals were named in Ressay's final indictment, Mokhtar Haouari and Abdel Ghani Meskini are of

particular interest. Haouari had a hand in establishing contact between Ressam and Meskini, one of Haouari's former colleagues living in Brooklyn NY at the time. Meskini was to serve as Ressam's logistical support in the USA. The extremist cell with which Ressam was involved in Montreal included Haouari who supported Ressam by providing a contact in the USA (Meskini) as well as money, a credit card and false identification (United States District Court, District of Minnesota, 2004). Haouari was subsequently deported by Canadian authorities to the USA where he was acquitted of the most serious terrorism charges, but convicted of four counts of bank and document fraud (Mansnerus, 2001).

- (3) Mohamed Warsame was arrested in 2003 in the USA and pled guilty to conspiring to provide support to a terrorist organization. After spending nearly 5½ years in solitary confinement, Warsame was sentenced in July 2009 to 7 years 8 months. He was deported back to Canada in August 2010. According to an affidavit filed by the FBI, Warsame admitted to providing material support in the form of remittances to individuals living in Pakistan whom he had previously met in Afghan terrorist training camps. Warsame came to Canada in 1989 as a Somali refugee and became a naturalized citizen in 1994. In 1995, while still living in Toronto, he married Fartun Farah, a resident of Minneapolis. After the marriage, he continued to live in Toronto, even after his spouse gave birth in 1998 to a daughter. In March 2000, Warsame left Canada and travelled to Afghanistan where he trained in two separate camps for about a year. In April 2001, using al-Qaeda funds, Warsame returned to Toronto, before moving to Minneapolis in April 2002 to become a permanent resident of the USA. During his post-training period in North America, he maintained contact with al-Qaeda members and provided financial support (United States Court of Appeal for the Ninth Circuit 2010).
- (4) Naji Antoine Abi Khalil was arrested on 19 May 2004 while attempting to ship night-vision goggles and infrared targeting equipment to Greece, allegedly in support of Lebanon-based Hizballah, a designated terrorist group under US law (United States Department of Justice, 2006a). Khalil is a dual citizen of Lebanon and Canada and was the Chairman and General Manager of New Line Services, an import/export company based in Montreal (United States Department of Justice, 2006a). Khalil legally crossed into the USA, flying from Canada to New York in May 2004 to meet with an undercover FBI agent at the Marriott Marquis Hotel in Manhattan regarding the illegal shipment of electronics out of the country. He met his "customer" (another undercover agent) who asked Khalil to ship night-vision goggles and other military equipment to Hizballah operatives in Athens, Greece (United States Attorney's Office, 2005). On 19 May 2004, Khalil and Tomer Grinberg, an accomplice of Khalil's, were arrested after the two men had inspected the equipment, loaded it into a minivan and accepted a down payment of US\$2500 for services rendered (United States Department of Justice, 2006a, 2006b). Khalil pled guilty to four charges, including providing material support and resources to a foreign terrorist organization. He was sentenced to 60 months in prison (United States District Court Southern District of New York, 2005).
- (5) Darren Thurston was arrested in the USA in 2005. The US government initially sought to impose terrorism-related charges, but cooperation and Thurston's guilty plea led to a reduction in the severity of the charges: rather than facing

charges of terrorism, Thurston was charged with arson and vandalism (Bernton, 2006). Thurston was part of a conspiracy orchestrated by a group known as The Family that was involved in a series of arsons and attempted arsons throughout the north-west USA. The Family was composed of members of the Earth Liberation Front and the Animal Liberation Front (ALF). Thurston was recruited in October 2001, by an American member of the terror cell when he was asked to participate in “an action” somewhere in the USA. To date, Thurston remains the only Canadian to have been recruited by The Family. Aside from Mezer, Thurston, along with Canadian accomplice, Rebecca *Rubin*, is the only example in our sample to have crossed the border into the USA illegally outside of a port of entry. In the USA, both were subsequently charged in connection with extensive damage caused by the release of animals and arson at the US Bureau of Land Management’s Litchfield Wild Horse and Burro Corrals in Susanville, CA (Bell, 2006). In addition to participating in the “action”, Thurston prepared the final copy of the communiqué claiming responsibility for the attack (Rankin, 2009). Thurston was subsequently sentenced to 37 months in jail. Rubin turned herself in to US authorities in November 2012 and pled guilty.

- (6) Canadian citizens Thiruthanikan *Thanigasalam*, Sathajhan *Sarachandran* and Sahilal *Sabaratham* were arrested 19 August 2006 in New York (along with five Americans) for conspiring to purchase anti-aircraft missiles and other equipment for the Liberation Tigers of Tamil Eelam (LTTE); Ramanan *Mylvaganam* was arrested in Canada and deported to the USA on conspiracy of providing material support to the LTTE. They were detained as part of a sting operation conducted by the FBI along with two other non-Canadian co-conspirators. In July 2006, Sarachandran crossed legally from Canada to the USA for a meeting with an FBI agent posing as an arms dealer. Thanigasalam, *Sarachandran* and *Sabaratham* (who was identified by his co-conspirators as “the financial guy”) travelled from Canada to NYC on 18 August 2006 (United States Department of Justice, 2006b). Thiruthanikan and *Sabaratham* were sentenced to 25 years in prison and 5 years of supervised release. *Sarachandran* was sentenced to 26 years in jail. *Mylvaganam* pled guilty and sentenced to time served. Suresh *Sriskandarajah* and Piratheepan *Nadarajah* were also arrested in Canada in 2006 on (unrelated) LTTE terrorism charges for conspiring to provide material support. *Sriskandarajah* is also alleged to have laundered money and initiated others into smuggling goods. Both have exhausted their appeals in Canada against extradition to stand trial in the United States but have not been convicted and thus do not (yet) meet the scope conditions of this article.
- (7) The Toronto 18 were arrested in mid-2006 and charged under Canada’s Anti-Terrorism Act. The first cross-border connection was established online between members of the Toronto 18 and interlocutors in the USA, UK and Pakistan. Through contacts developed on extremist websites, two individuals from the USA, Ehsanul Islam *Sadequee* and Sayed *Haris Ahmed*, crossed the border legally in March 2005 to visit members of the Toronto 18. Both were subsequently jailed on terrorism charges. In December 2009, *Sadequee* and *Ahmed* were sentenced to 17 and 13 years respectively, for conspiring to provide material support to terrorists (Rankin, 2009). The second cross-border connection involved two members of the Toronto 18, *Yasim*

Mohamed and Mohammed *Dirie* travelling to Columbus, OH to purchase handguns and ammunition. Mohamed and Dirie entered the USA legally and attempted to return to Canada with three semi-automatic handguns and ammunition (Canadian Broadcasting Corporation, 2008). Both defendants were initially charged with possessing and importing weapons across the border. Nine months into their sentence they were also charged in relation to supplying weapons for the purpose of terrorist activities. Dirie eventually pled guilty. Although terrorism charges against Mohamed were stayed in April 2008 that the men were together at the time is not in dispute (Teotonio, 2007).

- (8) Kassem *Daher* was indicted in the USA for fundraising, recruiting and supplying equipment to terrorist organizations. Daher, along with Kifah Wael Jayyousi, Adham Amin Hassoun, Jose Padilla and Mohammed Youssef, conspired to maim, kidnap or murder persons overseas and, provide material support to terrorist organizations. The charges stem from activity dating back to 1993 and continuing through 2001 when Daher was living in Leduc, Alberta where he owned a theatre. According to a criminal complaint filed by the FBI, the network to which Daher was connected was influenced by Sheikh Rahman, the spiritual leader of the Gama'a al-Islamiya. Sheikh Rahman was arrested in 1993 for the first bombing of the World Trade Center in NYC and the "Day of Terror" plot. By the time of Rahman's arrest, his terrorist network, of which Daher was part, was already established in North America (United States District Court District of Southern Florida, 2004). Daher's role in the terror conspiracy was to provide funding and guidance for individuals participating in violent jihad in various parts of the world. Evidence against Daher was collected almost entirely through intercepts of private communication. He did not travel to the USA himself. Together with his associates, he used benevolent organizations to transfer money to support extremist activities (United States Court of Appeals for the Eleventh Circuit, 2011). In 1998, Daher left Canada and returned to Lebanon where he was arrested and incarcerated in 2000 but released prior to 2005 and placed under house arrest (*National Post*, 2005).
- (9) Tahawwur Hussain *Rana*, a naturalized Canadian of Pakistani descent, was convicted in June 2011 on one count of conspiracy to support a terrorism plot and one count of providing material support to a designated foreign terrorist organization, Lashkar-i-Tayyiba. He is thought to have perpetrated both crimes while living in Chicago where he operated at First World Immigration Services. Rana was found guilty of conspiring to provide material support and resources for a planned attack on *Jyllands-Posten*,⁸ for which he faces a prison sentence of up to 30 years (sentencing is set for 15 January 2013). He had previously been acquitted of aiding and abetting a Pakistani terrorist group responsible for the 2008 Mumbai attacks (Freeze, 2011). His connection to his co-conspirators appears to stem from ties that Rana cultivated while studying at military school in Hasan Abdal, Pakistan and maintained after immigrating to Canada (Thompson, 2009). Although resident in the USA, Rana maintained his ties to Canada, visiting family in Canada in late December 2008 and returning to the USA on 1 January 2009 at the Detroit port of entry (United States District Court, Northern District of Illinois, 2009). Rana had crossed the border legally.

Two characteristics are notably absent from this list: women and lone wolves. First, gendered effects of delinquency-based selection and influence processes observed elsewhere (Haynie, Steffensmeier, & Bell, 2007) appear to show up in cross-border terror networks as well. Second, none of the individuals here qualify as “lone wolves”: all were involved in networks, although Mezer and Kahlil only networked after crossing into the USA. In fact, there are no known cases of lone wolves crossing the border during the timeframe covered by this study.

Social network analysis

Table 1 summarizes the cases in our sample. Some cases consisted of more than one subject which explains why the n of subjects is greater than the n of cases.

The cross-border networks in Table 1 serve different purposes:

- (1) Attacks on the USA from Canada by Canadians (Mezer – jihadi, 1997; Ressam – jihadi, 2000);
- (2) Attacks on the USA by a Canadian recruited from the USA (Thurston and Rubin – Animal Rights, 2005);
- (3) Drawing on support from the USA to increase capabilities of Canadians to carry out violent extremism in Canada and potentially facilitate domestic attacks (Toronto 18 – jihadi, 2006);
- (4) Support for global terrorism from a joint Canada–US base (Khalil – Hizballah, 2004; Daher – jihadi – al-Qaeda, 2005; Thanigasalam – LTTE – Sri Lanka, 2006);
- (5) Support for global terrorism from a US base by Canadians legally residing in the USA (Warsame – jihadi – 2003; Rana – jihadi – Denmark, 2009).

The inferences that can be drawn from these observations are limited. First, the size of this initial sample is relatively small; therefore, it can merely serve to generate hypotheses, not to test them. Second, the time frame for this study approximates the

Table 1. Summary of group properties.

Group	Year	Ideology	Border	Reason
Mezer	1997	Jihadi	Can–US	Attack USA
Ressam	1999	Jihadi	Can–US	Attack USA
Warsame	2003	Jihadi	US–Global	Resources
Khalil	2004	Hizballah	Can–US	Resources
Thurston/Rubin	2005	Animal Rights	Can–US	Attack USA
Thanigasalam et al.	2006	LTTE	Can–US–Sri Lanka	Resources
Daher	2005	Jihadi	Can–US–Global	Ideology, resources
Toronto 18	2006	Jihadi	US–Can	Resources, ideology, attack Canada
Rana	2009	Jihadi	US–Global	Attack Denmark

start of Canada's participation in the global fight against terrorism. That makes it more difficult to disentangle motivations and drivers because we cannot be sure of the role the global fight against terrorism may (or may not) have played in motivating these subjects to sympathize with terrorist activity. Third, many events that technically qualify as terrorism are nonetheless tried under different legislation, and thus do not end up being widely publicized in the media. For example, whether the ALF, with which Thurston and Rubin sympathized, is engaged in terrorism, sabotage, illegal direct action or extremism is debatable. Fourth, the number of convictions for terrorism in Canada or terrorism committed by Canadians is dwarfed by the number of terrorist incidents: there were 326 by one count between 1973 and 2006 (Leman-Langlois & Ouellet, 2009). For example, the Quebec-based *Initiative de résistance internationaliste* has claimed responsibility for several bombings (electricity towers in 2004, a car bombing in 2006 and the bombing of a Canadian Forces recruiting centre in 2010). Yet, no one has been indicted or convicted in any of these incidents. Since there are no subjects, any cross-border connections these incidents may have remain elusive. Finally, the sample does not include any Americans who have been convicted for terrorist-related activity in or involving Canada. That is because we have not found any for the 1997–2011 timeframe of this study. At least one American, Omar Hammami, is thought to have spent time in Canada but has not been linked to terrorist activity directed against Canada or the USA during the time he spent in Canada, and even if it did turn out that he engaged in such activity, he has not been convicted and thus does not meet the study's inclusion criteria.

These caveats notwithstanding, the sample gives rise to some interesting observations. As summarized in Table 2, few of the cases involved cross-border networks for the purpose of committing an actual terrorist attack in the adjacent country.

Table 2 suggests that cross-border activity is largely motivated by money and materiel that is more readily available in the USA than in Canada. Three cases involved cross-border networks with southbound targets in the USA. Abu Mezer managed to enter the USA illegally from Canada by himself but found something of an accomplice for his planned attacks in co-defendant Lafi Khalil. Ahmed Ressam travelled from Canada to the USA with the intention of targeting the USA. His activities were supported by a network that spanned not only the USA, but also parts of Asia where Ressam had attended terrorist training camps, in addition to connections in the UK.

Table 2. Summary of motivations of Canada–US cross-border activity.

Subjects	Motivation
Mezer	Attack vector
Ressam	Attack vector, logistical support
Warsame	Finance (USA to Al-Qaeda), training
Khalil	Material acquisition (USA to Greece)
Thurston/Rubin	Attack vector, recruitment
Thanigasalam et al.	Materiel acquisition (USA to Sri Lanka)
Daher	Collaboration, materiel provision (USA to Al-Qaeda), finance (USA to Al-Qaeda)
Toronto 18	Ideological support, materiel acquisition (USA to Canada)
Rana	Materiel provision (USA to Denmark)

Animal-rights activists Thurston and Rubin were active along the west coast, spanning the British Columbia/Washington corridor. Both were eventually arrested, albeit some years apart, on charges of arson in the USA. Northbound, there is only a single case: members of the Toronto 18 crossed the border with the intention of procuring weapons for an attack on Canadian targets.

Figure 1 maps the social networks connecting the extremists in the sample.

Since the attributes of networks are highly variable, the application of SNA allows us to break them down. Williams noted, as cited in Arquilla and Ronfeldt (2001) that:

Networks vary in size, shape, membership, cohesion, and purpose. Networks can be large or small, local or global, domestic or transnational, cohesive or diffuse, centrally directed or highly decentralized, purposeful or directionless. Networks facilitate flows of information, knowledge, and communication as well as more tangible commodities. (Arquilla & Ronfeldt, 2001, p. 65)

Within this exploratory study's sample of nine cases:

- two cross-border networks are between large groups on one side of the border and one or a few on the other (The Family – Thurston and Rubin, Toronto 18 – Sadeque and Ahmed);

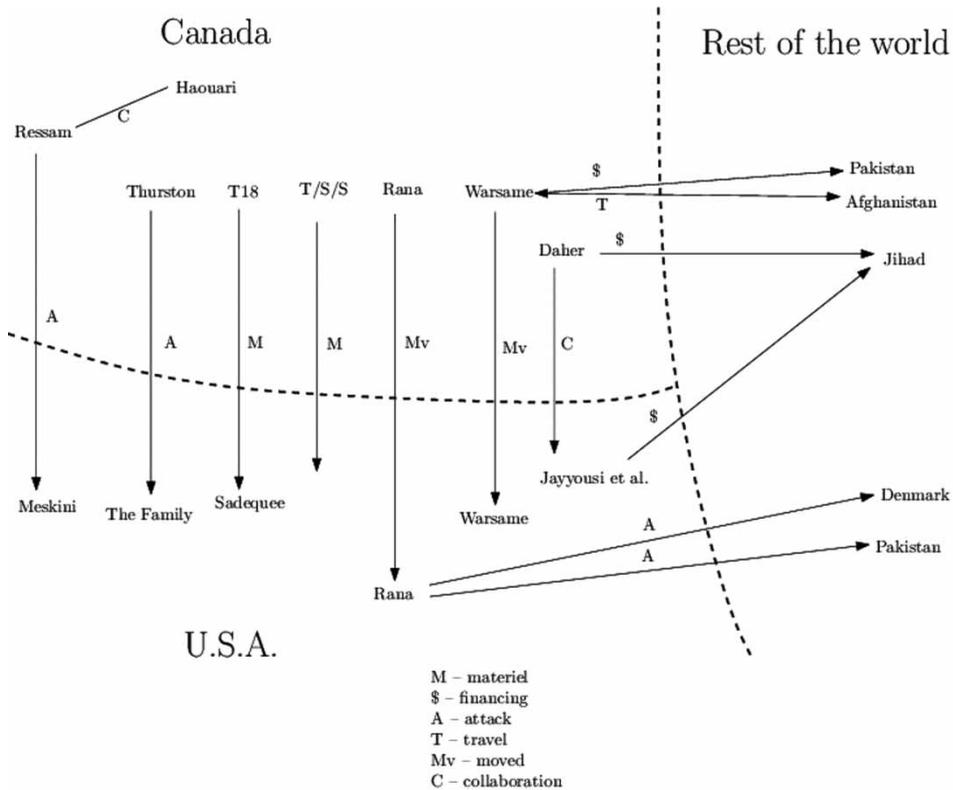


Figure 1. Social network of actors and borders.

- six are between small groups on both sides of the border (Khalil, Ressam, Warsame, Thanigasalam, Daher, Rana);
- five are for the purpose of enabling attacks in other countries (Khalil, Thanigasalam, Warsame, Daher, Rana);
- four derive from connections stemming from a country other than Canada (Ressam, Thurston, Thanigasalam, Rana) as countries of origin or places of terrorist training or propaganda.

Thus, we observe bipolar networks between Canadians and Americans, and multipolar networks between Canadians, Americans and other parts of the world. With the exception of Mezer and Ressam, multipolar networks tend to be focused on outbound attacks in third countries, rather than US-bound attacks that use Canada as a staging ground. In other words, Canadian terrorists tend to be drawn into larger social networks that have their origins elsewhere. Neither Canada nor Canadians, then, pose an asymmetric threat to the domestic security of the USA. On the contrary, the case of the Toronto 18 shows that threat is symmetric.⁹

The networks involving Canadians that reach across the border often harness ethnic social capital, where social capital is defined as “the aggregate of the actual or potential resources which are linked to possession of a durable network of institutionalized relationships of mutual acquaintance or recognition – or, in other words, to membership in a group” (Bourdieu, 1986, p. 51). In other words, what matters (and determines your role in the organization) is who you know, not what you know (see also Gunaratna, 2003; Sageman, 2004; Skillicorn, 2006). Family or relatives, ethnic kin, elites and rational selection are well-established as a key ingredient to the strength and robustness of cross-border networks (Magouirk et al., 2008; Massey, Ceballos, Espinosa, Palloni, & Spittel, 2001; Sheffer, 1986). In criminal networks, higher social capital has been consistently associated with greater and more attractive criminal opportunities (Descormiers, Bouchard, & Corrado, 2011; Morselli & Tremblay, 2004). That may explain why the majority of Canadian subjects are members of diaspora or interest groups who network in the USA for the purpose of supporting activities abroad. Establishing networks in the USA is largely done to procure equipment for overseas conflicts, and/or to establish cells to support conflict overseas.

Similar patterns emerge as to the purpose of networks. First, whether for use in Canada or abroad, logistical support is the principal reason behind cross-border networks. Canadian supporters of violent extremism look to the USA as a source country for weapons and financial support in much the same way that Mexican cartels smuggle weapons from the USA into Mexico (Council on Hemispheric Affairs, 2011). This phenomenon is probably a function both of fewer gun laws in the USA, and the fact that it is the world’s largest weapons industry and domestic market.

A second ostensible reason for the establishment of cross-border networks may be ideological support. The decision to support, plan or execute a terrorist attack is easier when there is moral and ideological support of a like-minded community. However, such individuals are few and far between. The cases of Thurston and the Toronto 18 intimate that crossing international boundaries is integral to overcoming the collective-action problems associated with finding and forming sympathetic communities. Establishing cross-border networks between like-minded individuals is facilitated by a relatively open border between Canada and the USA, a common language, similar rights in regards to freedom of association and the unencumbered movement of

information across the border. These linkages may also be a function of the greater latitude afforded to “freedom of speech” in the USA in contrast to the more tightly circumscribed “freedom of expression” in Canada. Certain types of extremist expression, such as hate speech, are an indictable offence in Canada but not in the USA (Newman, 2004). Although the cases at hand do not offer immediate evidence to this effect, there is evidence of Americans having been refused entry into Canada on grounds of previous speech acts or suspected radicalism in the USA. American academic Bill Ayers, co-founder of the Weather Underground, is a prominent example. Although never convicted of any felony related to Weather Underground activities, he has been refused entry into Canada since 2009.

Borders also impose costs and risks of detection when crossed, and these appear to provide some countervailing pressure against rich connections. We find no examples of large groups where the nodes on each side of the border are of comparable size; rather, they tend to divide with a large component on one side, and a much smaller component on the other (for example, the Toronto 18 and The Family).

Although confined to dynamics at the Canada–US border, SNA of these observations suggests the following hypotheses concerning the nature, drivers and direction of cross-border extremist traffic. These may be subjected to empirical scrutiny both elsewhere and as more data becomes available for the Canada–US border, contributing to the eventual development of a more generally applicable model:

H1: The existence of similar policies with regard to individual rights and freedoms enables the development of cross-border networks: Similar laws concerning freedom of association, speech and so forth make it easier for individuals and groups with like-minded goals and values to establish connections;

H2: Differences in policy create markets of opportunity on either side of the border;

H3: Those bent on extremist violence exploit the countervailing transaction costs thus created for material and ideational gain;

H4: Social, ethnic and diaspora capital acts as an enabler in the exploitation of countervailing transaction costs;

H5: Borders impose costs that limit the development of large, well-connected networks: large networks on one or other side of a border tend to interact with small units on the other side;

H6: The actors involved behave strategically, and cross-border networks are a means to an end.

Provided the last hypothesis in particular stands up to further empirical scrutiny, it would be good news: insofar as behaviour is rational, it is also predictable. That is interesting from the perspective of the social sciences which are premised on observing patterns: from the perspective of law enforcement and security intelligence which have a mandate to intercept and dismantle terrorist networks; and from the perspective of policy-makers insofar as this means the potential exists to influence such terrorist behaviour. What is more, conceptualized mathematically, the networks in our sample can also be assigned a “value” – which turns out to be quite low. According to

Metcalfé's law, whereas the cost of a network grows linearly with the number of connections, the value of a network is proportional to the square of the number of members (cf. Shapiro & Varian, 1999). Larger networks appear to have only small, constricted connections across borders. Quantitatively, then, the cross-border component adds little value as a network. Qualitatively though, even limited cross-border connections can add significant value to a network. For example, the ability to obtain firearms in the USA affords would-be Canadian terrorists an instantaneous attack capability that would otherwise be far more difficult to achieve.

Their qualitative potential, however, does not change the fact that the observed networks are neither particularly redundant nor resilient. They appear to have little capacity to re-generate, in part because they are composed of just a few weak ties. The cross-border component of our sample consists of mere chain networks, which helps explain why they have proven susceptible to detection. Their short-distance property means that discovering one member of a network increases the likelihood of discovering the rest. Granovetter's theory of the Strength of Weak Ties holds that the greater the number of inter-connected users, the greater is the threat due to a proliferation in the frequency of and capability to maintain bridging ties (Kennedy & Weimann, 2011). By virtue of having few bridging ties (which that make intergroup communication and operability possible and effective) a conventional chain network poses far less of a threat and is easier to contain or dismantle than a hub or an all-channel network (Jones, 2007). Sophisticated networks will address the ensuing vulnerability of detection by using some variant of the "cell" concept, where connections between groups are kept few and private (Stohl & Stohl, 2007).

Insofar as its utility as a tool for the study of terrorism is concerned, SNA thus goes beyond mere identification of the drivers, nature and direction of Canada–US cross-border traffic. SNA also makes it possible to assess the risks arising from such networks by gauging their sophistication. It also makes it possible to identify vulnerabilities and develop strategies for countering the genesis and diffusion of illicit networks. For instance, this study suggests that more resources, technology or collaboration at or between ports of entry would *not* have helped to catch the culprits in this sample. With the exception of Mezer, Thurston and his accomplice Rubin, the individuals in this study crossed the border perfectly legally at ports of entry. Rather, SNA shows that their networks ran afoul of conventional security criminal investigations. If the objective is indeed to keep the USA and Canada safe from terrorists, the questions remains as to how best to optimize the allocation of scarce resources? The application of SNA to the cross-border networks that underpin terrorist activity may help provide answers to such questions. Furthermore, this contributes to a growing literature on the lifecycle and operational effectiveness of such networks elsewhere in the world where they may be more pernicious but harder to study (Arquilla & Ronfeldt, 2001; Kenney, 2008; Kurth Cronin, 2006).

Conclusion

As North America becomes more integrated, the North American Free Trade Area has actually facilitated the trans-border movement of both legitimate and illicit goods, people and services (Hufbauer & Schott, 2005; Teslik, 2009), including weapons, money, technical support or other assets that enable violent extremist and organized criminal activities. The coordination of behaviour, sharing information and building relationships, make networks effective for legal and illegal activity alike (Raab & Milward, 2003). A 2007 study conducted by the Canadian Tobacco Manufacturers'

Council suggests that the illegal trade in tobacco between Canada and the USA costs the Canadian federal and provincial governments \$C1.6 billion a year in lost revenues (Canadian Press, 2007). If illicit traffickers exploit the comparative advantage created by differentials in border policy, it stands to reason that terror organizations might be inclined to do likewise. For example, obtaining a firearm in Canada is costly, difficult and might potentially expose the purchaser to scrutiny by law enforcement; so, why not reduce risk by procuring one inexpensively and perfectly legally at a gun show in Ohio where applicable laws are few and relatively lax? In short, the border policy that extremist and criminal groups can leverage to their advantage. To leverage that advantage, they form, spawn and diffuse networks.

The qualitative application of SNA here has shown that differentials in cross-border policy between Canada and the USA are susceptible to exploitation by violent extremists for the purpose of accessing resources, recruitment and – potentially – ideological support. In the bulk of the cases in the sample, the vulnerabilities that are being exploited are a function of distinct public policies between states that create markets of opportunity, thereby lowering transaction costs. Thurston is the notable exception: he was a target of opportunity for recruiters, not a systematic effort to exploit transaction costs across the Canada–US border. Yet, all the cases in this exploratory study suggest that violent extremists who cross the border are opportunists: they do so for resources and/or ideational affinity. At the same time though, the border seems to increase marginal costs: these networks are of low value and pose only a weak threat to the territorial USA *per se* because they are small-chain networks with few bridging ties, and their effort is primarily directed outside of North America. Moreover, the two North to South incidents predate the security measures stemming from 9/11; amateurish techniques are no longer plausible and Mezer and Ressay should, therefore, perhaps be treated as isolates (Salter & Piché, 2011, pp. 945–946).

Increased securitization and enforcement along the border between the USA and Mexico also correlates with the development of more complex criminal networks across the border (Andreas, 2000). Confronted with greater securitization and enforcement (Andreas, 2005), it is conceivable that terror networks along the border between the USA and Canada may eventually follow a similar trend. The fact that the evidence suggests that they have not done so thus far intimates that a network's characteristics may be influenced by its purpose. Criminal networks are profit maximizers, while terrorist networks are not.

From the application of SNA, this article thus infers that the most effective way of discouraging the formation and diffusion of cross-border networks is to minimize differences in markets of opportunity on either side of the border while maximizing the marginal costs for violent extremists looking to overcome countervailing transaction costs by crossing the border to exploit these markets of opportunity. The payoffs to be realized from cross-border networks as well as their diffusion for the purpose of procuring resources, then, are reduced by narrowing differentials in countervailing transaction costs. Whether this would reduce the incentive to look across the border for ideological and ideational support is more doubtful in societies that already enjoy a fairly high degree of freedom of speech. Harmonization will also not do much to counteract synergies arising from diaspora and other networks that are not actually seeking to exploit countervailing transaction costs. And policy harmonization would do little to reduce opportunities for terrorist activities that are directed against targets in the other country: those actors intent on attacking the USA will probably strive to do so regardless.

In summary, Canadians seem neither particularly prone to using Canada as a staging ground for an attack on the USA nor to systematically exploiting countervailing

transaction costs in the USA to stage domestic attacks in Canada. A far greater concern, by contrast, is cross-border collaboration involving Canadians and Americans to export materiel and finance from the USA to other parts of the world. Even this is smaller than the corresponding Canadian direct supply to other parts of the world (and presumably even more so for the US direct supply).

Contrary to some populist US rhetoric, there is neither asymmetric flow of terrorists using Canada as a staging ground to attack the USA, nor of Canadians resident in the USA targeting the USA. Rather, as the case of the Toronto 18 suggests, Canada is vulnerable to northbound traffic just as the USA is to southbound traffic. Mostly, however, politically motivated violent extremists are actively supporting terrorism further afield. On the one hand, the border seems to impose costs that constrain the development of large, well-connected terror networks that span the two countries. On the other hand, greater cross-border cooperation between Canada and the USA, such as the *Canada–US Shared Vision for Perimeter Security and Economic Competitiveness* of 2011, is unlikely to make the USA any more or less safe because it does little to address precisely those coordination problems that motivate violent extremists to reach across the border to begin with. The Agreement is, however, in line with the evidence in this article. Since most subjects crossed legally at ports of entry, the strategy that follows is to shift enforcement from control at the border to controlling flows instead. Controlling flows refers specifically to enforcement along the pathways that goods and people travel, rather than enforcement at the border line *per se*. This strategy multiplies access points for enforcement regimes to engage goods and people, augmenting the opportunities for the interception of contraband goods and people. At the same time, the evidence also suggests that greater bi-national cooperation across the Canada–US border will not necessarily make either country any safer. However, it appears likely that this will make the rest of the world more stable and secure by making it more difficult to exploit North America as a market of opportunity in a global terror supply chain, the impact of which reverberates far beyond North America.

Acknowledgement

The authors are grateful to Kenneth Hall for primary-source research assistance with this article.

Notes

1. This article operationalizes “terrorist activity” as defined in the *Criminal Code of Canada*, Section 83.01(1) retrievable at: <http://laws-lois.justice.gc.ca/eng/acts/C-46/page-24.html>.
2. For details on the Homegrown Terrorism Cases project at Syracuse University’s Maxwell School of Public Policy, see <http://homegrown.newamerica.net/table>.
3. Canadians rumoured to be participating in or to have been killed during terrorist activities overseas include:
 - (1) Ahmed Said Khadr, killed in 2001.
 - (2) Rudwan Khalil Abubaker killed in Chechnya in 2004.
 - (3) Abdul Rahman Jabarah killed in Saudi Arabia in 2003.
 - (4) Mohamed Elmi Ibrahim, killed in Somali 2010.
 - (5) The “lost boys” of Winnipeg (3 young men), believed to have joined the Jihadi in Pakistan in 2007.
 - (6) Five young males from Toronto believed to have joined Al-Shabaab in 2009.
4. Omar Hammami (who goes by the *nom de guerre* Abu Mansour Al Amriki (the American)), one of the most notorious American Al-Shabaab extremists, is a noteworthy outlier not

mentioned in this sample because, as a US citizen and someone who has not been convicted with evidence tested in court and court transcripts to corroborate his claims, he does not meet the scope conditions. Hammami hails from Daphne, Alabama, born to a Syrian engineer and an American Southern Baptist mother (United States Department of Justice, 2010). He has been indicted by the FBI for providing material support to Al-Shabaab. By his autobiographical account, *The story of American Jihad* (2012), after having converted to Islam in 2002, he travelled to Toronto in 2004 to court an Ethiopian woman. He claims to have spent a year in Toronto, ended up marrying a Somali and moved to Cairo before travelling on to Somalia in 2006 with fellow American Daniel Maldonado where he reported was killed in 2011 although a video or blog posting has surfaced periodically.

5. Court documents, like interviews and other sources of data, are not without bias. For example, only evidence that has been legally gathered can be presented in court. This standard alone may exclude information that would otherwise be useful to network analysis.
6. Searches included PACER which provides US Federal Court records for a fee, LexisNexis (Canadian Legal Information Institute (CanLii)).
7. Although the *Criminal Code of Canada* did not list terrorism as an offence until 2004, going back to 1999 enlarges the sample with a view to making the results more robust. Of course, cross-border activity of a terrorist nature pre-dates 1999: Walid Nicolas Kabbani, Walid Majib Mourad and Georges Fouad Nicolas Younan, Morley Sean Gerard (John) McCann, Mohammed Dbouk, John (Omar) Shahin. However, including earlier cases in the sample may have risked biasing the sample as resource constraints for this project meant being able to go back only as far as 1999 in a comprehensive search of the universe of all possible cases.
8. A Danish newspaper that had published a series of cartoons deemed offensive by some Muslims.
9. Another example to this effect but one that falls outside the inclusion criteria of this study is that of Dbouk whose materiel-purchase traffic also runs south to north.

Notes on contributors

Christian Leuprecht is an associate professor of political science at the Royal Military College of Canada and cross-appointed to the Department of Political Studies as well as the School of Policy Studies at Queen's University where he is also a fellow of the Centre for International and Defence Policy and the Institute of Intergovernmental Relations. He has published a dozen books and over 60 book chapters and articles that have appeared in journals such as *Terrorism and Political Violence*, the *Canadian Journal of Political Science*, *Regional and Federal Studies* and *Commonwealth and Comparative Politics*.

T. S. Todd Hataley is employed in the Canadian security sector and is an adjunct professor at the Royal Military College of Canada and as a research fellow at the Centre for International and Defence Policy at Queen's University. His research interests include: extremist violence, management of international boundaries, regional security, and security reform. Dr Hataley is the author of over 20 scholarly publications. His most recent publications include: *North American Regional Security: A Trilateral Framework* (Lynne Rienner Press) and *Evolving Transnational Threats and Border Security: A New Research Agenda* (CIDP, Queen's University).

David B. Skillicorn is a professor in the School of Computing at Queen's University, where he heads the Smart Information Management Laboratory. His research interests are in knowledge discovery, particularly for counterterrorism and fraud. He has authored more than a hundred papers, and several books. His PhD is from the University of Manitoba, and his undergraduate degree from the University of Sydney.

References

- Acharya, A. (2009). *Targeting terrorist financing*. New York, NY: Routledge.
- Andreas, P. (2000). *Border games: Policing the U.S.-Mexico divide*. Ithaca: Cornell University Press.

- Andreas, P. (2005). The Mexicanization of the US-Canada border: Asymmetric interdependence in a new security context. *International Journal*, 60, 449–464.
- Arquilla, J., & Ronfeldt, D. (2001). *Networks and netwars: The future of terror, crime and militancy*. Santa Monica, CA: Rand.
- Bell, S. (2006, January 21). Canadian indicted for “domestic terrorism” animal rights activist accused of attacks in five American states. *National Post*, p. A1.
- Bernton, H. (2006, July 22). Guilty plea entered in 5-state arson spree. *The Seattle Times*. Retrieved December 9, 2012, from <http://community.seattletimes.nwsources.com/archive/?date=20060722&slug=elfplea22m>
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 214–258). New York, NY: Greenwood Press.
- Bower-Bell, J. (2000). *The IRA 1968–2000: An analysis of a secret army*. London: Frank Cass.
- Bruce, S. (1992). *The red hand: Protestant paramilitaries in Northern Ireland*. Oxford: Oxford University Press.
- Buchanan, M. (2002). *Nexus: Small worlds and the groundbreaking science of networks*. New York, NY: W.W. Norton.
- Canadian Broadcasting Corporation. (2008, June 2). *Toronto 18: Key events in the case*. Retrieved November 29, 2012, from <http://www.cbc.ca/news/canada/story/2008/06/02/toronto-timeline.html>
- Canadian Legal Information Institute (CanLii). *Federation of Law Societies of Canada*. Retrieved November 2012, from www.canlii.org/en/index.php
- Canadian Press. (2007, August 3). Illegal cigarette trade thriving in Quebec and Ontario. *CTV News*. Retrieved September 11, 2011, from http://www.ctv.ca/CTVNews/Canada/20070803/illegal_cigarette_trade_070803/
- Chermak, S., Freilich, J. D., Parkin, W. S., & Lynch, J. P. (2011). American terrorism and extremist crime data sources and selectivity bias: An investigation focusing on homicide events committed by far-right extremists. *Journal of Quantitative Criminology*, 28, 191–218.
- Coogan, T. P. (1995). *The IRA*. London: Harper-Collins.
- Council on Hemispheric Affairs. (2011, June 27). *Mexican drug violence fueled by U.S. guns*. Retrieved September 11, 2011, from <http://www.coha.org/mexican-drug-violence-fueled-by-u-s-guns/>
- Della Porta, D. (1995). *Social movements, political violence and the state*. Cambridge: Cambridge University Press.
- Descormiers, K., Bouchard, M., & Morselli, C. (2011). Strain, social capital and access to lucrative crime opportunities. *International Journal of Child, Youth and Family Studies*, 1–2, 83–98.
- Donnan, H., & Wilson, T. M. (1999). *Borders: Frontiers of identity, nation and state*. New York, NY: Berg.
- 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, 7–44.
- Emerson, S. (2000, January 26). *An investigation into the Operations of Terrorist Networks in the United States and Canada*. U.S. House of Representatives, Judiciary Subcommittee on Immigration and Claims. Retrieved December 9, 2012, from <http://www.investigativeproject.org/documents/testimony/10.pdf>
- Fair, C. C. (2008). Who are Pakistan’s militants and their families? *Terrorism and Political Violence*, 20, 49–65.
- Featherstone, D., Phillips, R., & Waters, J. (2007). Introduction: Spatialities of transnational networks. *Global Networks*, 7, 383–391.
- Freeze, C. (2011, August 24). Eyewitness: As trial begins, Canadian recalls surviving massacre. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/national/eyewitness-as-trial-begins-canadian-recalls-surviving-2008-mumbai-massacre/article580694/>
- Giraldo, J. K., & Trinkunas, H. A. (2007). Introduction. In J. K. Giraldo & H. A. Trinkunas (Eds.), *Terrorism financing and state responses: A comparative perspective* (pp. 7–20). Palo Alto, CA: Stanford University Press.
- Gunaratna, R. (2003). *Inside al Qaeda*. New York, NY: Columbia 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, NY: Routledge.

- Gunning, J. (2009). Social movement theory and the study of terrorism. In R. Jackson, M. Breen Smyth, & J. Gunning (Eds.), *Critical terrorism studies: A new research agenda* (pp. 156–177). London: Routledge.
- Hammami, O. (2012). *The story of American Jihad, Part 1*. Retrieved May 17, 2012, from <http://jihadology.net/2012/05/16/new-book-from-omar-hammami-abu-man%E1%B9%A3ur-al-amriki-the-story-of-an-american-jihadi-part-1/>
- Haynie, D., Steffensmeier, D., & Bell, K. (2007). Gender and serious violence: Untangling the role of friendship sex composition and peer violence. *Youth Violence and Juvenile Justice*, 5, 235–253.
- Hegghammer, T. (2006). Terrorist recruitment and radicalization in Saudi Arabia. *Middle East Policy*, 13, 39–60.
- 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.
- Horgan, J. (2012). Interviewing the terrorists: reflections on fieldwork and implications for psychological research. *Behavioural Sciences of Terrorism and Political Aggression*, 4, 195–211.
- Hufbauer, C. G., & Schott, J. J. (2005). *NAFTA revisited: Achievements and challenges*. Washington, DC: Pearson Institute for International Economics.
- Jamieson, A. (1989). *The heart attacked: Terrorism and conflict in the Italian state*. London: Marian Boyers.
- Jones, S. G. (2007). Fighting networked terrorist groups: Lessons from Israel. *Studies in Conflict and Terrorism*, 30, 281–302.
- Kennedy, J., & Weimann, G. (2011). The strength of weak terrorist ties. *Terrorism and Political Violence*, 23, 201–212.
- Kenney, M. (2008). *From Pablo to Osama: Trafficking and terrorist networks, government bureaucracies, and competitive adaptation*. University Park: Penn State University Press.
- Kurth Cronin, A. (2006). How al Qaida ends: The decline and demise of terrorist groups. *International Security*, 31, 7–48.
- LaFree, G. (2012). Generating terrorism event databases: Results from the global terrorism database, 1970 to 2008. In C. Lum & L. W. Kennedy (Eds.), *Evidence-based counterterrorism policy* (pp. 41–64). New York, NY: Springer Science + Business Media.
- Leman-Langlois, S., & Ouellet, G. (2009). L'évolution du terrorisme au Canada, 1973–2006. In S. Leman-Langlois & J.-P. Brodeur (Eds.), *Terrorisme et antiterrorisme au Canada* (pp. 58–72). Montréal: Les Presses de l'Université de Montréal.
- Lösch, A. (1954). *The economics of location* (2nd ed.) (W. H. Woglom with W. F. Stolper, Trans.). New Haven, CT: Yale University Press.
- Macko, S. (1997, August 1). Terrorist plot to bomb New York City subway system. *Daily Intelligence Report*. Retrieved October 1, 2012, from <http://web.archive.org/web/20080527072357/http://www.emergency.com/ternyc97.htm>
- Magouirk, J., Atran, S., & Sageman, M. (2008). Connecting terrorist networks. *Studies in Conflict and Terrorism*, 31, 1–16.
- Mansnerus, L. (2001, July 14). Man is guilty in bomb plot at millennium. *The New York Times*. Retrieved May 27, 2012, from <http://www.nytimes.com/2001/07/14/nyregion/man-is-guilty-in-bomb-plot-at-millennium.html>
- Massey, D. S., Ceballos, M., Espinosa, K., Palloni, A., & Spittel, M. (2001). Social capital and international migration: A test using information on family networks. *American Journal of Sociology*, 106, 1262–1299.
- Matthew, R., & Shambaugh, G. (2005). The limits of terrorism: A network perspective. *International Studies Review*, 7, 617–627.
- Moens, A., & Gabler, N. (2012). *Measuring the costs of the Canada-U.S. border*. Fraser Institute. Retrieved September 3, 2012, from <http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/measuring-the-costs-of-the-canada-us-border.pdf>
- Morselli, C., & Tremblay, P. (2004). Criminal achievement, offender networks and the benefits of low self-control. *Criminology*, 42, 773–804.

- National Post*. (2005, November 23). Canadian indicted as terror cell master. Retrieved August 26, 2012, from <http://www.canada.com/national/nationalpost/news/story.html?id=96ebfd2e-c268-47c5-ac64-037c5490e684>
- Newman, D. (2001). Boundaries, borders and barriers: Changing geographic perspectives on territorial lines. In M. Albert, D. Jacobson, & Y. Lapid (Eds.), *Identities, borders, orders: Rethinking international relations theory* (pp. 137–151). Minneapolis: University of Minnesota Press.
- Newman, S. L. (2004). American and Canadian perspectives on hate speech and the limits of free expression. In S. L. Newman (Ed.), *Constitutional politics in Canada and the United States* (pp. 153–173). Albany, NY: State University of New York Press.
- Payan, T. (2006). *The three U.S.-Mexico border wars: Drugs, immigration and homeland security*. Westport, CT: Praeger Security International.
- Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behaviour*, 12, 295–336.
- Raab, J., & Milward, H. B. (2003). Dark networks as problems. *Journal of Public Administration Research and Theory*, 13, 413–439.
- Rankin, B. (2009, December 14). Homegrown terrorists sent to prison. *Atlanta Journal-Constitution*. Retrieved November 29, 2012, from <http://www.ajc.com/news/news/local/homegrown-terrorists-sent-to-prison/nQZzp/>
- Ressler, S. (2006). Social network analysis as an approach to combat terrorism: Past, present and future research. *Homeland Security Affairs*, 2, 1–10.
- Sageman, M. (2004). *Understanding terror networks*. Philadelphia: University of Pennsylvania Press.
- Salter, M., & Piché, G. (2011). The securitization of the US-Canada border in American political discourse. *Canadian Journal of Political Science*, 44, 929–951.
- Sapolsky, H. M. (2005). Canada: Crossing the line. *Breakthroughs*, 14, 31–37.
- Shapiro, C., & Varian, H. L. (1999). *Information rules*. Cambridge, MA: Harvard Business Press.
- Sheffer, G. (1986). Political aspects of Jewish fundraising for Israel. In G. Sheffer (Ed.), *Modern diasporas in international politics* (pp. 258–293). London: Croon Helm.
- Sheffer, G. (2005). Diasporas, terrorism and WMD. In A. Blum, V. Asal, & J. Wilkenfeld (Eds.), *Nonstate actors, terrorism and weapons of mass destruction*. *International Studies Review*, 7, 133–170.
- Shoemaker, J. (2012). *Border crossings and terrorist attacks in the United States: Case studies*. Report to Science and Technology Directorate, U.S. Department of Homeland Security. College Park, MD: National Consortium for the Study of Terrorism and Responses to Terrorism.
- Siqueira, K., & Sandler, T. (2010). Terrorist networks, support and delegation. *Public Choice*, 142, 237–253.
- Skillicorn, D. B. (2006). Social network analysis via matrix decompositions: Applications to al Qaeda. In R. Popp & J. Yen (Eds.), *Emergent information technologies and enabling policies for counter terrorism* (pp. 367–392). Hoboken: John Wiley – IEEE Press.
- Stohl, C., & Stohl, M. (2007). Networks of terror: Theoretical assumptions and pragmatic consequences. *Communication Theory*, 17, 93–124.
- Taylor, M. (1988). *The terrorist*. London: Brassey's.
- Teotonio, I. (2007, September 24). Homegrown terror case goes to trial. *The Toronto Star*. Retrieved November 29, 2012, from <http://www.thestar.com/News/Canada/article/260004>
- Teslik, L. E. (2009, July 7). NAFTA's economic impact. *Council on Foreign Relations*. Retrieved May 27, 2012, from <http://www.cfr.org/economics/naftas-economic-impact/p15790>
- Thompson, G. (2009, November 22). A terror suspect with feet in east and west. *The New York Times*, A1. Retrieved May 25, 2012, from http://www.nytimes.com/2009/11/22/us/22terror.html?pagewanted=all&_r=0
- United States Attorney's Office. (2005, August 9). *Man pleads guilty to federal charges of attempting to export military night-vision equipment to Hizballah* (Report No. 05–179). United States Attorney Southern District of New York. Retrieved December 8, 2012, from <http://www.justice.gov/usao/nys/pressreleases/August05/khalilpleapr.pdf>

- United States Court of Appeals for the Eleventh Circuit. (2011, September 19). *United States v. Kifah Wael Jayyousi et al.* Appeals from the United States District Court for the Southern District of Florida. D. C. Docket No. 04-60001 CR-MGC. Retrieved December 8, 2012, from <http://docs.justia.com/cases/federal/appellate-courts/ca11/08-10494/200810494-2011-09-19.pdf?1316453195>
- United States Court of Appeals for the Ninth Circuit. (2010, February 2). *United States v. Ahmed Ressam.* No. 09-30000. D.C. No. 2:99-cr-00666-JCC-1. Retrieved December 8, 2012, from <http://www.ca9.uscourts.gov/datastore/opinions/2010/02/02/09-30000.pdf>
- United States Department of Justice. (2006a, February 13). Naji Antoine Abi Khalil sentenced to 60 months' imprisonment for attempting to export military night-vision equipment to Hizballah. United States Attorney Southern District of New York. Retrieved December 8, 2012, from http://www.bis.doc.gov/news/2006/doj02_13_06.htm
- United States Department of Justice. (2006b, August 21). Eight defendants arrested by the FBI and charged with conspiring to provide material support and resources to a foreign terrorist organization and related offenses. Department of Justice Eastern District of New York. Retrieved December 8, 2012, from <http://www.justice.gov/usao/nye/pr/2006/2006Aug21.html>
- United States Department of Justice. (2010). Fourteen charged with providing material support to Somalia-based terrorist organization Al-Shabaab. Retrieved January 2, 2013, from <http://www.justice.gov/opa/pr/2010/August/10-ag-898.html>
- United States District Court, District of Minnesota. (2004, February 6). *United States v. Mohammed Abdulla Warsame.* Affidavit of Kiann Vandenoever. Crim. No. 04-29 (JRTIFLN). Retrieved December 8, 2012, from http://www.investigativeproject.org/documents/case_docs/549.pdf
- United States District Court District of Southern Florida. (2004, December 1). *United States v. Kifah Wael Jayyousi and Dassem Daher.* Criminal complaint of FBI Special Agent John Kavanuagh. 40-3565RID. Retrieved December 9, 2012, from http://www.investigativeproject.org/documents/case_docs/310.pdf
- United States District Court Eastern District of New York. (1998, June 16). *United States v. Gazi Ibrahim Abu Mezer and Lafi Khalil,* Superseding Indictment. 214 F.3d 111 (2nd Cir. 2000). Retrieved December 9, 2012, from <https://bulk.resource.org/courts.gov/c/F3/214/214.F3d.111.98-1723.99-1134.1999.html>
- United States District Court, Northern District of Illinois. (2009, October 18). Eastern Division, *United States v. Tahawwur Hussain Rana.* Criminal Complaint of Special Agent Lorenzo Benedict, Federal Bureau of Investigation. Retrieved December 9, 2012, from http://www.justice.gov/usao/iln/pr/chicago/2009/pr1027_01a.pdf
- United States District Court Southern District of New York. (2005). *United States v. Naji Antoine Abi Khalil and Tomer Grinberg,* Indictment. Retrieved December 9, 2012, from http://www.investigativeproject.org/documents/case_docs/233.pdf
- White, R. (1993). *Provisional Irish republicans: An oral and interpretive history.* Westport, CT: Greenwood Press.