# THE SYSTEM OF DOMESTIC COUNTERTERRORISM LAW ENFORCEMENT

# Steven R. Morrison\*

Edward Snowden's recent leaks of the NSA's telephony metadata collection program, and the Internet surveillance programs PRISM and XKeyscore are only the latest iterations of the "big data" phenomenon. Arriving just in time for 9/11, new technologies have enabled government agencies to collect and aggregate massive amounts of information, usable in counterterrorism and domestic law enforcement alike. While such moves have probably stopped some terrorist plots, they also entail systemic inefficiencies that lead unavoidably to unjust results, in the form of both false positives and false negatives. This Article explains these inefficiencies by describing a complex positive feedback loop inherent in domestic counterterrorism law enforcement.

Introduction	342
I. A SHORT HISTORY OF CRIME MAPPING	347
II. LIMITATIONS OF SOCIAL NETWORK MAPPING	
A. Operator Bias	352
B. Data Collection	
C. Determining Link Relevance	
III. NETWORK ANALYSIS AND ITS POSITIVE FEEDBACK LOOP	355
A. General Crime Mapping's Positive Feedback Loop	357
B. Counterterrorism's Positive Feedback Loop	
IV. COMPONENTS OF THE COUNTERTERRORISM LOOP	365

<sup>\*</sup> Assistant Professor of Law, University of North Dakota School of Law. I would like to thank the organizers of the Sixth Annual National Security Law Faculty Workshop, which are South Texas College of Law, Bobby Chesney, and Geoff Corn. Many thanks also to the attendees, who offered invaluable comments. They include Chris Bailey, Dru Brenner-Beck, Gary Brown, Bobby Chesney, Geoff Corn, Anjali Dalal, Chris Donesa, Jonathan Hafetz, Dick Jackson, Kristine Huskey, Jeff Kahn, Peter Margulies, Deborah Pearlstein, Dawn Powers, and Rachel VanLandingham. Thanks also to comments from fellow University of North Dakota School of Law faculty members Julia Ernst and C.J. Vachon. Thanks to Aziz Huq for his usual detailed and insightful comments. Finally, thanks to the staff of the Stanford Law & Policy Review, especially Gaëlle Tribié, for their hard work. This Article could not have been possible without the support of the University of North Dakota School of Law and Dean Kathryn R. L. Rand. All errors are my own.

A. Stabilizers	366
B. Positive Drivers	
C. Negative Drivers	372
ONCLUSION: NATIONAL SECURITY VS. LOCALISM	374

## INTRODUCTION

During summer 2013, former National Security Agency contractor Edward Snowden treated the nation to a series of revelations about the National Security Administration's (NSA) domestic surveillance program. It began in June, when Snowden told the *Guardian* that the NSA obtained telephony metadata from telecommunications companies<sup>1</sup> and could capture individuals' Internet activities.<sup>2</sup> After numerous other revelations,<sup>3</sup> and admitted legal violations,<sup>4</sup> the latest news is that the NSA tested a program that could determine people's locational data through their cell phones.<sup>5</sup>

<sup>1.</sup> Glenn Greenwald, NSA Collecting Phone Records of Millions of Verizon Customers Daily, THE GUARDIAN (June 5, 2013), www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order.

<sup>2.</sup> Glenn Greenwald & Ewan MacAskill, NSA Prism Program Taps in to User Data of Apple, Google and Others, THE GUARDIAN (June 6, 2013), www.theguardian.com/world/2013/jun/06/us-tech-giants-nsa-data.

<sup>3.</sup> These revelations included reports that Snowden could, "sitting at [his] desk, wiretap anyone, from you or your accountant, to a federal judge or even the president, if [he] had a personal email," Barton Gellman, NSA Broke Privacy Rules Thousands of Times Per Year, Audit Finds, WASH. POST (Aug. 15, 2013), http://articles.washingtonpost.com/2013-08-15/world/41431831\_1\_washington-post-national-security-agency-documents; Amanda Willis, New Snowden Leak: NSA Program Taps All You Do Online, CNN (Aug. 1, 2013), http://www.cnn.com/2013/07/31/tech/web/snowden-leak-xkeyscore/index.html; that a program was used to access President Bill Clinton's personal email, Kim Zetter, NSA Secret Database Ensnared President Clinton's Private E-mail, WIRED (June 17, 2009), www.wired.com/threatlevel/2009/06/pinwale; and that analysts could "search with no prior authorization through vast databases containing emails, online chats and the [nearly complete] browsing histories of millions of individuals" in real time, Glenn Greenwald, XKeyscore: NSA Tool Collects "Nearly Everything a User Does on the Internet," THE GUARDIAN (July 31, 2013), www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data.

<sup>4.</sup> Eyder Peralta, NSA Says Some Analysts Willfully Violated Spying Authority, NPR (Aug. 23, 2013), http://www.npr.org/blogs/thetwo-way/2013/08/23/214917391/nsa-says-some-analysts-willfully-violated-spying-authority; Daniel Politi, Report: NSA Bugged United Nations Headquarters, Spied on European Union Diplomats, SLATE (Aug. 25, 2013), http://www.slate.com/blogs/the\_slatest/2013/08/25/der\_spiegel\_report\_claims\_nsa\_bugged\_united\_nations\_headquarters.html; Charlie Savage, N.S.A. Often Broke Rules on Privacy, Audit Shows, N.Y. TIMES (Aug. 16, 2013), www.nytimes.com/2013/08/16/us/nsa-often-broke-rules-on-privacy-audit-shows.html; Scott Shane, Court Upbraided N.S.A. on Its Use of Call-Log Data, N.Y. TIMES (Sept. 10, 2013), www.nytimes.com/2013/09/11/us/court-upbraided-nsa-on-its-use-of-call-log-data.html.

<sup>5.</sup> Charlie Savage, *In Test Project, N.S.A. Tracked Cellphone Locations*, N.Y. TIMES (Oct. 2, 2013), www.nytimes.com/2013/10/03/us/nsa-experiment-traced-us-cellphone-locations.html.

Much of the NSA's work is to discern what connections exist among people who are apparently unrelated. People with no connection to known or suspected terrorists may be pulled into surveillance through what is known as "hop" or "chain" analysis, in which analysts are taught to look at the records of the suspect, but also "the records of everyone he calls, everyone who calls those people and everyone who calls those people." The bases for surveilling someone include mundane factors like "someone whose language is out of place for the region they are in" and "someone searching the web for suspicious stuff."

This Article locates these post-9/11 surveillance moves in the larger system of domestic counterterrorism law enforcement of which the NSA programs are a part. This system is characterized by a complex, positive feedback loop that, over time, pulls more people into its orbit. This feedback loop is based on social network analysis, which has its historical roots in crime mapping. This Article summarizes that history, details the contemporary social network feedback loop, and explains how the loop produces inefficiencies in the form of false positives and false negatives.

It is held as truth that more data, if it is well-managed—that is, arranged in a useful way that reflects its true meaning—and effectively searchable, will inevitably improve law enforcement's ability to spot dangerous patterns and discern criminal intent.<sup>8</sup>

This Article challenges that assumed truth on two fronts. First, data mining may not produce its presumed accurate results. Bruce Schneier, for example, has argued that data mining will produce wasted law enforcement efforts in chasing false positives, and will also produce false negatives, because all that data mining does is enlarge the haystack. When what you are looking for is a rarity—as terrorist plots, or at least attacks, are 9—and its rate of occurrence rel-

<sup>6.</sup> See Pete Yost & Matt Apuzzo, With 3 "Hops," NSA Gets Millions of Phone Records, The Seattle Times (last modified July 31, 2013), available at http://seattletimes.com/html/politics/2021506283\_apusnsasurveillance.html ("President Barack Obama's national security team acknowledged for the first time Wednesday that, when investigating one suspected terrorist, it can read and store the phone records of millions of Americans.").

<sup>7.</sup> Amy Davidson, *Presenting XKeyscore: What the N.S.A. is Still Hiding*, THE NEW YORKER, July 31, 2013, www.newyorker.com/online/blogs/closeread/2013/07/presenting-xkeyscore-what-the-nsa-is-still-hiding.html.

<sup>8.</sup> See CIA v. Sims, 471 U.S. 159, 178 (1985) (as with the "mosaic theory" often invoked by the Government in cases involving national security information, "[w]hat may seem trivial to the uninformed, may appear of great moment to one who has a broad view of the scene") (citing Halkin v. Helms, 598 F.2d 1, 9 (D.C. Cir. 1978); United States v. Maynard, 615 F.3d 544, 562 (D.C. Cir. 2010); see also Samuel J. Rascoff, Domesticating Intelligence, 83 S. CAL. L. REV. 575, 575-76 (2010) (describing a risk assessment approach to domestic counterterrorism in which "domestic intelligence seeks to quantify a risk before it materializes, based on the careful analysis of aggregative data").

<sup>9.</sup> MARK R. ROSENBLUM, CONG. RESEARCH SERV., COMM. ON HOMELAND SEC. SUBCOMM. ON OVERSIGHT, INVESTIGATIONS, AND MGMT., BORDER SECURITY ISSUES (Nov. 16,

ative to all environmental conduct is quite low, then enlarging that field will make detecting the rarity statistically even more unlikely. <sup>10</sup>

Second, the positive feedback loop resulting from counterterrorism law enforcement produces increasing systemic inefficiencies that (1) do not reduce data noise or reveal real criminal patterns; (2) reinforce the preconceived notion that such law enforcement *does* reduce noise and reveal patterns; and (3), as a result of (1) and (2), often lead to inaccurate targeting of suspects (either as false positives or false negatives). These results are inaccurate and inefficient law enforcement responses. Because this is a positive, or self-reinforcing, feedback loop, these three inefficiencies tend to grow over time, resulting in systemic instability.

These inefficiencies emerge because of the apparent, but unproven, reliability of the digital age mosaic database that allows the government to link suspects with each other in social network maps, whether they have an actual relationship or not. The faith that the government gives to these linking efforts amounts almost to a fetish. It is instantiated at trial as prosecutors invoke the global jihad movement, a rhetorical tactic that is not entirely vacuous, accurate, or new. In the 1950s, prosecutors alleged the existence of an "international Communist movement," similar in form and function to the global jihad movement. Both were supposed to indicate a worldwide network of people, closely aligned in ideology and criminal purpose to destroy the United States. They both worked to enable prosecutors to allege damning conspiracies and introduce questionably relevant evidence thereof. They both also retained cur-

2012); Ezra Klein, If You Are Scared, They Win. If You Refuse to Be Scared, They Lose, WASH. POST (Apr. 16, 2013), www.washingtonpost.com/blogs/wonkblog/wp/2013/04/16/if-you-are-scared-they-win-if-you-refuse-to-be-scared-they-lose; Editorial, After Boston Tragedy, Let True Patriotism Reign, PORTLAND PRESS HERALD (Apr. 17, 2013), http://www.pressherald.com/opinion/after-boston-tragedy-let-true-patriotism-reign\_2013-04-17.html; Editorial, Vigilance and Resilience in Wake of Attack, PRESS DEMOCRAT (Apr. 16, 2013), http://www.pressdemocrat.com/article/20130416/opinion/130419647.

- 10. Bruce Schneier, Why Data Mining Won't Stop Terror, WIRED, Mar. 9, 2006, http://www.wired.com/politics/security/commentary/securitymatters/2006/03/70357.
- 11. One company, IntelCenter, seems to have tapped into this fetish, producing a series of attractive interpersonal linking charts for particular geographic regions, individual luminaries, and specific actual attacks. INTELCENTER, http://www.intelcenter.com/wc.html (last visited Jan. 9, 2014).
- 12. Fetish definition, MERRIAM-WEBSTER, http://www.merriam-webster.com/dictionary/fetish (defining "fetish" as "an object . . . believed to have magical power to protect or aid its owner") (last visited Jan. 18, 2014).
  - 13. See generally MARC SAGEMAN, UNDERSTANDING TERROR NETWORKS (2004).
- 14. This is to say that E+D characterizes both law enforcement moves that appropriately respond to real emergent criminal patterns and law enforcement moves that respond to perceived, but unreal criminal or terrorist threats. E+D is, therefore, a descriptive, rather than normative, theory.
  - 15. Dennis v. United States, 341 U.S. 494, 546 (1951).
- 16. Yates v. United States, 354 U.S. 298, 339 (1957) (Black, J., concurring in part and dissenting in part); see also In re Terrorist Attacks on September 11, 2001, 740 F. Supp. 2d

rency as valid evidentiary tropes because observers believed that they signaled real foreign existential threats to democracy and society itself.<sup>17</sup> This expansive vision produces expansive law enforcement, and thus the feedback loop.

This loop starts with the assumption that a large number of people around the globe have the intent to engage in terrorist acts. Data mining and network mapping are the central (but not only) drivers of the loop. For example, law enforcement agencies profile certain groups, such as mosque attendees in the greater New York metropolitan area. 18 Agencies watch and infiltrate these groups and engage in data mining (through informants, undercover agents, suspects' Internet use, wiretaps, etc.), then deposit this data into aggregators like the Total Information Awareness (TIA) system, <sup>19</sup> the Multistate Anti-Terrorism Information Exchange (MATRIX), <sup>20</sup> and the Disposition Matrix. <sup>21</sup> Law enforcement then accesses this linked informational world and "connects the dots"22 to discern veins of terroristic criminal intent or planning (XKeyscore may serve this connection function). The data mosaic is therefore remapped (or reimagined) to produce patterns that apparently reveal people with terroristic intent and their supposed affiliates. Law enforcement then locates a suspect, who has not "yet" committed any crime. Given the data mosaic, however, there is often enough evidence to charge the suspect with conspiracy,<sup>23</sup> providing material support,<sup>24</sup> making a false statement,<sup>25</sup> or an immigra-

494, 504 (S.D.N.Y. 2010); United States v. Elmardoudi, 611 F. Supp. 2d 864, 866 (N.D. Iowa 2007).

<sup>17.</sup> See Bernard Lewis, Communism and Islam, 30 INT'L AFF. 1, 9 (1954); Wadie E. Said, The Message and Means of the Modern Terrorism Prosecution, 21 TRANSNAT'L L. & CONTEMP. PROBS. 175, 188-89 (2012).

<sup>18.</sup> Matt Apuzzo & Adam Goldman, With CIA Help, NYPD Moves Covertly in Muslim Areas, ASSOCIATED PRESS (Aug. 23, 2011), http://www.ap.org/Content/AP-in-the-News/2011/With-CIA-help-NYPD-moves-covertly-in-Muslim-areas (documenting the NYPD's undercover efforts to "map the city's human terrain").

<sup>19.</sup> Jeffrey Rosen, *Total Information Awareness*, N.Y. TIMES (Dec. 15, 2002), http://www.nytimes.com/2002/12/15/magazine/15TOTA.html.

<sup>20.</sup> WILLIAM J. KROUSE, CONG. RESEARCH SERV., RL32536, THE MULTI-STATE ANTITERRORISM INFORMATION EXCHANGE (MATRIX) PILOT PROJECT (Aug. 18, 2004), available at http://www.fas.org/irp/crs/RL32536.pdf.

<sup>21.</sup> Greg Miller, *Plan for Hunting Terrorists Signals U.S. Intends to Keep Adding Names to Kill Lists*, WASH. POST (Oct. 23, 2012), http://articles.washingtonpost.com/2012-10-23/world/35500278\_1\_drone-campaign-obama-administration-matrix.

<sup>22.</sup> JOHN HOLLYWOOD ET AL., RAND CORP, "CONNECTING THE DOTS" IN INTELLIGENCE: DETECTING TERRORIST THREATS IN THE OUT-OF-THE-ORDINARY (2005), available at http://www.rand.org/pubs/research\_briefs/RB9079.html; Pam Benson, Scramble to Connect Dots in New Terror Threat, CNN (Sept. 9, 2011), http://security.blogs.cnn.com/2011/09/09/scramble-to-connect-dots-in-new-terror-threat/; Michael Scherer, Obama's Terrorism Postmortem: Still Not Connecting the Dots, TIME, Jan. 6, 2010, http://www.time.com/time/nation/article/0,8599,1951882,00.html.

<sup>23.</sup> Steven R. Morrison, *The System of Modern Criminal Conspiracy*, CATH. U. L. REV. (forthcoming 2013), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1955158.

tion violation.<sup>26</sup> If none of these charges are available, the government may arrest the suspect as a material witness.<sup>27</sup> With these arrests, the threat of the global jihad movement is reified and confirmed.<sup>28</sup> The global jihad movement and the evidence produced from the data mosaic assume evidentiary relevance and probity and therefore become the legal truth.<sup>29</sup> Having their initial suspicions confirmed, law enforcement agencies engage in more group targeting, more data mining, and more data aggregation. The feedback loop is complete, and is positive because it self-reinforces.

The system of counterterrorism law enforcement is unstable and therefore produces inefficiencies—specifically, it targets people who are innocent (or, as in the case of the targeted killing of Anwar al-Aulaqi, who may not have deserved the punishment imposed) and may not detect people who in fact have terroristic criminal intent.<sup>30</sup> The initial (and persistent) need to pursue terrorists just after 9/11 caused the government to engage in a set of law enforcement tactics, including but not limited to mosque infiltration, data aggregation, and racial and religious profiling. These tactics may or may not have been practically sound law enforcement decisions. They were, however, self-reinforcing, creating the positive feedback loop I describe. Some have commented that as the attacks of 9/11 recede, law enforcement responses to terrorism seem, counterintuitively, to be getting more and more normatively problematic.<sup>31</sup> The reason for this is that the feedback loop has been reinforcing initial law enforcement

<sup>24.</sup> David Cole, *The New McCarthyism: Repeating History in the War on Terrorism*, 38 HARV. C.R.-C.L. L. REV. 1, 14-15 (2003); Dru Stevenson, *Effect of the National Security Paradigm on Criminal Law*, 22 STAN. L. & POL'Y REV. 129, 154 (2011).

<sup>25.</sup> See Second Superseding Indictment, United States v. Mehanna, No. 1:09-cr-10017-GAO (D. Mass. June 17, 2010).

<sup>26.</sup> See Second Superseding Indictment, United States v. Al-Hussayen, No. CR 03-0048-C-EJL (D. Idaho Mar. 4, 2004).

<sup>27.</sup> See Ashcroft v. Al-Kidd, 131 S. Ct. 2074 (2011); Mayfield v. United States, 599 F.3d 964, 967 (9th Cir. 2010); Lauryn P. Gouldin, When Deference is Dangerous: The Judicial Role in Material-Witness Detentions, 49 Am. CRIM. L. REV. 1333 (2012).

<sup>28.</sup> See the discussion below, regarding confirmation biases and feedback loops.

<sup>29.</sup> See In re Terrorist Attacks on September 11, 2001, 714 F.3d 659, 667 (2d Cir. 2013); Am. Freedom Def. Initiative v. Suburban Mobility Auth. for Reg'l Transp., 698 F.3d 885, 889 (6th Cir. 2012); United States v. Elmardoudi, 611 F. Supp. 2d 864, 866 (N.D. Iowa 2007).

<sup>30.</sup> Pete Yost, *FBI Interviewed Tamerlan Tsarnaev*, *Dead Bombing Suspect*, *In 2011: Official*, HUFFINGTON POST (Apr. 20, 2013, 9:07 AM), http://www.huffingtonpost.com/2013/04/20/official-fbi-interviewed-tamerlan-tsarnaev-2011\_n\_3122134.html.

<sup>31.</sup> Erik Luna, Criminal Justice and the Public Imagination, 7 OHIO ST. J. CRIM. L. 71, 114 (2009); Nadine Strossen, Problematic Post-9/11 Judicial Inactivism: Immunizing Executive Branch Overreaching, in Confronting Terror: 9/11 and the Future of American National Security 235 (Dean Reuter & John Yoo eds., 2011) (The state secrets privilege "has been invoked by both the Bush and Obama administrations with increasing frequency and success as an automatic, door-closing non-justiciability doctrine."); Radley Balko, A Decade after 9/11, Police Departments are Increasingly Militarized, Huffington Post (last updated Nov. 12, 2011 5:12 AM), http://www.huffingtonpost.com/2011/09/12/police-militarization-9-11-september-11\_n\_955508.html.

moves, resulting in a distancing from criminal law norms that have traditionally operated as system stabilizers. The problematic aspects of the feedback loop are often intractable because its origin was 9/11 - a very real and deadly event.

#### I. A SHORT HISTORY OF CRIME MAPPING

The United States' law enforcement efforts against terrorist networks partake of traditional descriptive crime mapping and contemporary predictive efforts. But this 9/11-era social network mapping is fundamentally different. It does not map where actual terrorists reside or where terroristic crimes were committed; rather, it maps connections among people, from the leaders of al-Qaeda to supposed wannabe terrorists in the heart of the United States, who are connected to the terrorist organization sometimes by only a few tenuous online relationships.<sup>32</sup> This mapping presumes the potential probative value of the theory of six degrees of separation.<sup>33</sup> The theory goes: because only four people stand between me and bin Laden, I must be a terrorist.

This network mapping is enabled by the digital age, which allows the government to amass and aggregate huge amounts of data about individuals around the globe.<sup>34</sup> This mosaic database<sup>35</sup> holds the promise that data noise will be substantially reduced, patterns of data indicative of terroristic intent or conduct will come into relief, and the government will thereby be able to prevent another 9/11 through a networked version of pre-crime law enforcement.

This Part, then, sets forth the five stages in the history of crime mapping, beginning in 1829 and proceeding to our digital-age attempts to map social networks<sup>36</sup> and make them functional anti-terrorism tools.

<sup>32.</sup> One company, FMS Advanced Systems Group, has produced a "Social Network Analysis" whose graphic display is aesthetically beautiful, but may carry little probative value. Social Network Analysis (SNA) Software with Sentinel Visualizer Diagrams, FMS ADVANCED SYS. GRP., http://www.fmsasg.com/SocialNetworkAnalysis (last visited Jan. 9, 2014). See also The Terrorist Network in America, 1991-2007, INVESTIGATIVE PROJECT ON TERRORISM, http://www.investigativeproject.org/maps.php (last visited Jan. 9, 2014).

<sup>33.</sup> See Stanley Milgram, The Small-World Problem, PSYCHOL. TODAY, May 1967, at 61.

<sup>34.</sup> See U.S. Dep't of Justice v. Reporters Comm. for Freedom of the Press, 489 U.S. 749, 764 (1989) ("[T]he issue here is whether the compilation of otherwise hard-to-obtain information alters the privacy interest implicated by disclosure of that information. Plainly there is a vast difference between the public records that might be found after a diligent search of courthouse files, county archives, and local police stations throughout the country and a computerized summary located in a single clearinghouse of information."); Will Thomas DeVries, Protecting Privacy in the Digital Age, 18 BERKELEY TECH. L.J. 283, 306 (2003).

<sup>35.</sup> See Orin S. Kerr, The Mosaic Theory of the Fourth Amendment, 111 MICH. L. REV. 311 (2012).

<sup>36.</sup> See James Risen & Laura Poitras, N.S.A. Gathers Data on Social Connections of U.S. Citizens, N.Y. TIMES (Sept. 28, 2013), at A1, available at http://www.nytimes.com/2013/09/29/us/nsa-examines-social-networks-of-us-citizens.html ("[The NSA] has been exploiting its huge collections of data to create sophisticated graphs of some Americans' social

Comparative crime mapping. In 1829, French lawyer and social ecologist André-Michel Guerry used one of the first choropleth maps.<sup>37</sup> These are thematic maps in which areas are shaded or patterned in proportion to the measurement of the statistical variable being depicted, such as population density or per capita income. Guerry used them to compare crime rates around France to climate, level of education, and other factors.<sup>38</sup> Seeking to understand why crime manifested in the way it did, Guerry's work would later be adopted by modern police forces and others to show where in a geographic area crime occurred and, by extension, where it was predicted to occur. Belgian Adolphe Quetelet followed suit in 1831, producing a map of crimes against property in France, <sup>39</sup> and, in 1847, Englishman Joseph Fletcher began to publish maps that compared British crime rates to ignorance.<sup>40</sup>

It does not appear that these early maps were used to manage crime or direct law enforcement assets, such as they existed then. The first modern police force was created in London in 1829, <sup>41</sup> and it was charged first with patrolling the streets, keeping the peace, and, later, investigating crime. <sup>42</sup> It was likely uninterested in macro-level sociological issues. These maps were not meant for tactical deployment of law enforcement assets or community awareness, rather these maps suggest a Benthamite concern with connecting crime to larger sociological trends, many of which are class-based, in order to facilitate social reform.

Asset deployment crime mapping. Beginning in the late 1980s, and still used today, a new form of crime mapping became important for law enforcement and criminal justice agencies.<sup>43</sup> This new crime mapping involves localized maps that display the analysis of "specific crimes, crime rates, and the identification of geographic crime loci by offense category."<sup>44</sup> New York

connections that can identify their associates, their locations at certain times, their traveling companions and other personal information.").

-

<sup>37.</sup> MICHAEL FRIENDLY, MILESTONES IN THE HISTORY OF THEMATIC CARTOGRAPHY, STATISTICAL GRAPHICS, AND DATA VISUALIZATION 16-17 (2009), available at http://www.math.yorku.ca/SCS/Gallery/milestone/milestone.pdf.

<sup>38.</sup> Robert Cook & Howard Wainer, A Century and a Half of Moral Statistics in the United Kingdom: Variations on Joseph Fletcher's Thematic Maps, SIGNIFICANCE, June 2012, at 31, 32; Michael Friendly, A.-M. Guerry's Moral Statistics of France: Challenges for Multivariable Spatial Analysis, 22 STAT. SCI. 368 (2007).

<sup>39.</sup> Cook & Wainer, supra note 38, at 32.

<sup>40.</sup> Id. at 33.

<sup>41.</sup> Steven J. Heyman, *The First Duty of Government: Protection, Liberty and the Fourteenth Amendment*, 41 DUKE L.J. 507, 544 (1991).

<sup>42.</sup> Malcolm Thorburn, Reinventing the Night-Watchman State?, 60 U. TORONTO L.J. 425, 433-34 (2010).

<sup>43.</sup> John D. Althausen & Thomas M. Mieczkowski, *The Merging of Criminology and Geography Into a Course on Spatial Crime Analysis*, 12 J. CRIM. JUST. EDUC. 367, 368 (2001).

<sup>44.</sup> *Id*.

City's CompStat system may be the most prominent example of this type of crime mapping. 45

These crime maps consolidate on one map the various criminal incidents that have taken place in the past. Broadly termed Geographic Information Systems (GIS), this mapping "has been used to produce maps depicting crime 'hot spots' as well as to conduct spatial analyses that suggest relationships between crime and characteristics of the social and physical environments in which crime concentrations occur." <sup>46</sup> Much of this data collection is so localized that people can propose reducing crime through thinking about the architecture of cities, neighborhoods, and individual buildings. <sup>47</sup> This mapping has two overt purposes: to direct future law enforcement assets based on past criminal patterns, and to increase community awareness by informing residents of criminal incidents in their neighborhoods. There is, therefore, an element of prediction associated with modern crime mapping. This prediction, however, is of crime trends, <sup>48</sup> rather than of individual criminal intent.

Simple social network analysis. More recently, the popularity of social network analysis has emerged, certainly to augment traditional mapping in the crime context, but also to provide a new way to conduct domestic and international counterterrorism. Yang and Sageman define a social network as

a network representing social actors and their interactions or relationships, in which nodes represent the actors and links represent the interactions or relationships . . . . Social groups are collections of actors who are closely linked to one another. Social positions are sets of actors who are linked into the total social system in similar ways. 49

A Google Images search for "social network analysis" will uncover a virtually endless number of aesthetically attractive analyses purporting to illustrate networks of members of al-Qaeda<sup>50</sup> and other, more mundane, networks.<sup>51</sup> The

<sup>45.</sup> M. Todd Henderson et al., Predicting Crime, 52 ARIZ. L. REV. 15, 29 (2010).

<sup>46.</sup> Elizabeth R. Groff & Nancy G. La Vigne, *Forecasting the Future of Predictive Crime Mapping*, in ANALYSIS FOR CRIME PREVENTION 29, 30 (Nick Tilley ed., 2002).

<sup>47.</sup> Neal Kumar Katyal, Architecture as Crime Control, 111 YALE L.J. 1039, 1041 (2002).

<sup>48.</sup> Groff & La Vigne, supra note 46, at 49.

<sup>49.</sup> Christopher C. Yang & Marc Sageman, *Analysis of Terrorist Social Networks with Fractal Views*, 35 J. INFO. SCI. 299, 300 (2009).

<sup>50.</sup> FMS ADVANCED SYSTEMS GROUP, supra note 32.

<sup>51.</sup> Barcelona vs AC Milan Passing Distribution, SCIENTOMETRICS KNOWLEDGE MGMT. & SOC. NETWORK ANALYSIS (Feb. 21, 2013), http://scientometrics.wordpress.com/2013/02/21/barcelona-vs-ac-milan-passing-distribution (soccer passing distributions); Aleks Krotoski, Another Fabulous Network Image: Academy Award Thanks, Soc. SIM (Mar. 1, 2007), http://socialsim.wordpress.com/2007/03/01/another-fabulous-network-image-academy-award-thanks (Academy Award winners); Kalyani Misra, Social Network Analysis of May 09 & November 09 Conference, Soc. Network Analysis (Oct. 27, 2010), http://kalyanimisra.blogspot.com/2010/10/social-network-analysis-of-may-09.html (analyzing a tutor-mentor conference in Chicago).

government is also using social network analysis to hunt terrorists.<sup>52</sup> The 9/11 attacks, unsurprisingly, brought what was an academic and abstract interest in social networks into use in war strategy.<sup>53</sup> The most conservative purposes of simple social network mapping involve typical investigations: understanding the structure of criminal organizations and connections, determining who the leaders are, and detecting weaknesses that may be exploited.

Simple social network analysis is controversial because it may not be effective as a tool for counterterrorism. <sup>54</sup> This is so in part because the analysis is meant to reveal incriminating information about individual suspects, such as their *mens rea* to commit terrorist acts, rather than general, depersonalized crime trends. One U.S. official even claimed that applying social network analysis in war zones has led to unethical practices. <sup>55</sup> One reason for this possible ineffectiveness is that the analyses remain static, whereas the networks they depict are constantly changing. <sup>56</sup> Another reason is that simple social network mapping is concerned only with the "who" in networks—it shows only whether people are connected in any way to others and does not account for the content or nature of that connection. <sup>57</sup> "The tricky part of . . . network analysis is not finding the links but knowing which of them are significant."

Dynamic social network analysis. Dynamic social network mapping, or "dynamic metanetwork analysis," (DNA), maps the "who," in networks, but it also proposes to map the when, what, where, and why. <sup>59</sup> A leading thinker in the field, Kathleen Carley, has written that DNA focuses first on "relational data" about "the links or ties among entities such as people, groups, knowledge, resources, events and locations. The second is a focus on change; i.e., how are these relations likely to change normally and in response to strategic interven-

<sup>52.</sup> John Bohannon, Counterterrorism's New Tool: 'Metanetwork' Analysis, 325 SCIENCE 409, 409 (July 24, 2009); K.A. Taipale, Data Mining and Domestic Security: Connecting the Dots to Make Sense of Data, 5 COLUM. SCI. & TECH. L. REV. 1, 84, 123 (2003); Thom Shanker, Insurgents Set Aside Rivalries on Afghan Border N.Y. TIMES (Dec. 29, 2010), http://www.nytimes.com/2010/12/29/world/asia/29military.html?pagewanted=all (explaining that intelligence officials assessed that al-Qaeda and associated terrorist groups operate as a "loose federation [that] was not managed by a traditional military command-and-control system, but was more akin to a social network of relationships").

<sup>53.</sup> Bohannon, supra note 52.

<sup>54.</sup> *Id*. at 410-411.

<sup>55.</sup> *Id*.

<sup>56.</sup> Id. at 410.

<sup>57.</sup> Id. at 411.

<sup>58.</sup> Brian Hayes, Can the Tools of Graph Theory and Social-Network Studies Unravel the Next Big Plot?, 94 Am. Scientist 400 (Sept.-Oct. 2006), available at http://www.americanscientist.org/issues/id.3495,y.2006,no.5,content.true,page.6,css.print/issue.aspx.

<sup>59.</sup> Bohannon, *supra* note 52; Xiaoyu Wang et al., *Investigative Visual Analysis of Global Terrorism*, 27 COMPUTER GRAPHICS F. 919, 919 (2008).

tion."60 Carley's approach attends to "why the link was created and the interpretation as to what the links mean."61

DNA holds two promises. The first is to provide a nuanced, dynamic picture of terrorist networks themselves. The second is to show how strategic external intervention might affect the network. <sup>62</sup> DNA, therefore, might be useful in reactive criminal prosecutions, proactive investigations, and, in a war zone, compiling target lists and engaging in counterinsurgency.

Predictive social network analysis. The historical arc of crime mapping has been toward the accessible, dynamic mapping of networks as they exist in the present and evolve. Work continues to enable these networks to approach what I call the "prediction horizon" in law enforcement and counterterrorism, to enable agents to, colloquially, "connect the dots." Put another way, as social network mapping becomes more detailed and dynamic, its usefulness in responding to crime increases and approaches the point at which the map reflects current reality—as its reality-reflective lag time approaches zero. It has not, however, been demonstrated to cross the prediction horizon such that the map can reliably guide law enforcement to interdict future crime.

Work by Groff and La Vigne illustrates the persistent connection between retrospective and predictive crime mapping, as they view prediction of future crimes as dependent upon crime "hot spots" of the past.<sup>64</sup>

Predictive crime mapping, therefore, continues to rely on past events as data and may be limited to predicting geographic hot spots rather than individual criminal conduct. A leading network mapper, Valdis Krebs, acknowledged this limitation, cautioning that social network analysis cannot prove guilt, even if one is associated with terrorists. Others have noted that the predictive power of social networks remains in its infancy. Furthermore, structural realities that limit even the retrospective reliability of social networks exacerbate any potential predictive function.

<sup>60.</sup> Kathleen M. Carley, Dynamic Network Analysis for Counter-Terrorism, 3 (unpublished manuscript) (on file with author).

<sup>61.</sup> Id. at 4.

<sup>62.</sup> Hayes, supra note 58.

<sup>63.</sup> Taipale, *supra* note 52, at 11, 12-21, 23.

<sup>64.</sup> Groff & La Vigne, *supra* note 46, at 29, 30.

<sup>65.</sup> Valdis E. Krebs, *Mapping Networks of Terrorist Cells*, 24 CONNECTIONS 43, 49 (2002).

<sup>66.</sup> Brooke Foucault Welles, *Predictive Network Analysis in Game User Research*, CHI'12 (2012), *available at* http://hcigames.businessandit.uoit.ca/chigur/wpcontent/uploads/2012/04/gurchi2012\_submission\_9.pdf; Groff & La Vigne, *supra* note 46, at 30, 46, 48.

<sup>67.</sup> Henderson et al., *supra* note 45, at 31 ("[N]o widely accepted method for predicting criminal activity has emerged.").

#### II. LIMITATIONS OF SOCIAL NETWORK MAPPING

Until the advent of programs like XKeyscore, there was little application of DNA to terrorism data.<sup>68</sup> Specific structural realities may limit XKeyscore's reliability.

# A. Operator Bias

A presumed advantage of all types of crime mapping, including DNA, is that they provide a fact-based, objective picture of criminal or terrorist activity. To the contrary, the operation of these networks continues to depend upon human action to determine what data is deemed to be relevant<sup>69</sup> and also to create data-collection algorithms that adequately filter data to produce reliable, useable results.<sup>70</sup>

Network data compilers, like anyone, have self-interested motives when compiling network data.<sup>71</sup> They want to create network analyses that reflect reality and so permit the efficient direction of law enforcement resources, but crime mapping is also used to publicize the efficiency of police and to provide grounds for their continued support.<sup>72</sup> This motivation is expressed, as one commenter observes, in "gimmicks and tricks" to maximize the apparent threat of crime.<sup>73</sup>

One such trick is based on crime reporting and categorization.<sup>74</sup> An accurate crime map depends upon accurate reporting and categorization, which can be undermined when agents exercise their discretion to not charge a crime, charge down a crime, or charge up a crime. This discretion is often an important justice-producing part of the criminal system, but it is also often used to

<sup>68.</sup> Wang et al., supra note 59, at 921.

<sup>69.</sup> Henderson et al., *supra* note 45, at 30.

<sup>70.</sup> Hayes, *supra* note 58 ("[A]lgorithms must somehow distinguish a few dozen people intent on mayhem from other groups of the same size and structure who are planning a family reunion.").

<sup>71.</sup> See Daniel T. Blumstein, Selfish Sentinels, 284 SCIENCE 1633, 1633 (1999) (offering that animal sentinels have been thought to be selfless, but may act as sentinels for selfish motives); John A. List, Young, Selfish and Male: Field Evidence of Social Preferences, 114 ECON. J. 121, 121 (2004) ("[M]any scholars have conjectured that private provision of public goods is inefficient because of the tendency for individuals to free-ride."); David O. Sears & Richard R. Lau, Inducing Apparently Self-Interested Political Preferences, 27 Am. J. POL. SCI. 223, 223 (1983) ("Economic theorists . . . believe that voters use politics as a vehicle for maximizing their own private financial self-interest."); Chen-Bo Zhong et al., Good Lamps Are the Best Police: Darkness Increases Dishonesty and Self-Interested Behavior, 21 PSYCHOL. SCI. 311 (2010) (to the extent that operators are anonymous, they may engage in dishonest compilation of data).

<sup>72.</sup> Aurora Wallace, Mapping City Crime and the New Aesthetic of Danger, 8 J. VISUAL CULTURE 5, 6 (2009).

<sup>73.</sup> *Id*.

<sup>74.</sup> Jerry Ratcliffe, *Implementing and Integrating Crime Mapping Into a Police Intelligence Environment*, 2 INT'L J. POLICE SCI. & MGMT. 313, 314 (1999).

make police departments appear more effective or neighborhoods safer than they really are. <sup>75</sup> In each case, any resulting crime map will not be perfectly accurate.

The production of crime maps and social network analyses is, moreover, not unidirectional—operators produce the maps, but the maps also inform the operators and reinforce operators' beliefs. As two commentators have said, maps tells us as much about ourselves as they do about the thing depicted. Maps, in other words, create reality. This is important because government attempts to socially network terror are billed as reliable methods of depicting objective reality, but observer effects and observer-expectancy effects operate to undermine the alleged reliability of networking and remind us that maps are subject to the biases of the map creators.

#### B. Data Collection

Social network mapping depends upon the collection of large amounts of data such that automated, algorithm-directed collection becomes necessary. This collection accesses open sources such as articles culled from the Internet and processed for categorization and conceptual generalization according to human-constructed thesauri. These sources are heterogeneous, which creates consistency problems. Just as code creates the architecture of the Internet, and thus determines how and to what extent people can access information online, compilation of data for social network mapping operates within a structure that limits how much data can be accessed and selectively compiles only certain types of data. This leads to what might be called "relationship distortion," meaning that actual interpersonal linkages may not be depicted in the network and the linkages that are depicted do not necessarily depict reality.

Evidence of the data collection problem is found in a network analysis that Carley performed, the depiction of which she entitled "Al Qaeda 2002 Actorto-Actor Network." This network linked Ariel Sharon to Yasir Arafat in ap-

<sup>75.</sup> See Wendy Ruderman, Crime Report Manipulation is Common Among New York Police, Study Finds, N.Y. TIMES, June 28, 2012, at A19, available at http://www.nytimes.com/2012/06/29/nyregion/new-york-police-department-manipulates-crime-reports-study-finds.html.

<sup>76.</sup> Nils Zurawski & Stefan Czerwinski, Crime, Maps and Meaning: Views from a Survey on Safety and CCTV in Germany, 5 Surveillance & Soc'y 51, 55 (2008).

<sup>77.</sup> Carley, supra note 60, at 19; Taipale, supra note 52, at 84.

<sup>78.</sup> Krebs, *supra* note 65, at 45.

<sup>79.</sup> Carley, supra note 60, at 9.

<sup>80.</sup> Mohammad Al Hasan, Link Prediction Using Supervised Learning 9 (unpublished manuscript) (on file with author).

<sup>81.</sup> See generally LAWRENCE LESSIG, CODE 2.0 1 (2006) ("Code is law."); Neal Kumar Katyal, Digital Architecture as Crime Control, 112 YALE L.J. 2261 (2003).

<sup>82.</sup> See Wallace, supra note 72, at 15.

<sup>83.</sup> Carley, supra note 60, at 14.

parent affinity with al-Qaeda and each other, despite the facts that neither man was a member of al-Qaeda<sup>84</sup> and the two men did not share views such that their linkage reflected affinity.<sup>85</sup> Carley's analysis also linked Osama bin Laden to Saddam Hussein, even though bin Laden viewed Hussein as a non-Muslim secularist and Hussein viewed al-Qaeda as a threat, with no affinity between the two or any connection for purposes of counterterrorism.<sup>86</sup> Bin Laden was also linked to Jose Padilla,<sup>87</sup> who emerged to be little more than a well-traveled terrorist hanger-on.<sup>88</sup> Despite this, Padilla, bin Laden, and even Israeli Prime Minister Benjamin Netanyahu were listed together as "emergent leaders of the group."<sup>89</sup> According to Carley, given the position of these men, "it should be difficult to recover from the loss of these individuals given their extensive expertise and position in terms of complex tasks."<sup>90</sup>

While Carley's specific model may be amenable to technical fixes, it also suggests that the whole enterprise of predictive models, if they depend upon automation and algorithms, is of dubious reliability. In short, the more data is collected, the more automated the process becomes, and thus the less reliable the data is. In turn, as data collection becomes more humanized, it becomes more nuanced and reliable, but it also cannot contribute to predictive modeling. As for now, it appears that there is an unavoidable trade-off between evidentiary reliability and investigative scope.

# C. Determining Link Relevance

It is easy to find links, but difficult to judge their relevance. <sup>91</sup> This is so in part because the amount of data of rare network events like terrorist groupings, compared to the massive amount of surrounding, innocent network behavior, is so small that samples to inform a network model are difficult to find. This can

<sup>84.</sup> Ian Fisher, *Arafat Warns Al Qaeda*, N.Y. TIMES, Dec. 22, 2002, at C2 ("Yasir Arafat, the Palestinian leader, demanded that al-Qaeda stop using the Palestinian cause to justify terror attacks. Mr. Arafat has long taken care to distance his cause from Osama bin Laden's in order to avoid alienating international supporters.").

<sup>85.</sup> See Lamia Lahoud, Arafat: Sharon's Plan 'Violation Of Agreements,' JERUSALEM POST, Feb. 24, 2002, at 2; Sharon Tells Arafat to End Violence, Palestinian Leadership Denounces Settlements Expansion, ALBAWABA NEWS (Apr. 8, 2001), http://www.albawaba.com/news/sharon-tells-arafat-end-violence-palestinian-leadership-denounces-settlements-expansion.

<sup>86.</sup> Daniel Benjamin, Saddam Hussein and Al Qaeda Are Not Allies, N.Y. TIMES, Sept. 30, 2002, at A25.

<sup>87.</sup> Carley, supra note 60, at 15.

<sup>88.</sup> See United States v. Jayyousi, 657 F.3d 1085 (11th Cir. 2011).

<sup>89.</sup> Carley, supra note 60, at 17.

<sup>90.</sup> Id.

<sup>91.</sup> Hayes, *supra* note 58, at 3.

result in noisy data<sup>92</sup> results, which deteriorate the performance of the analysis.<sup>93</sup>

Compounding this data rarity problem is the fact that networks often depend on "weak ties," so that networks "consist[] of clusters tightly bound internally by strong ties and loosely linked to other clusters by weak ties." If the prevailing view of terrorist networks is one of diffuse cells, then their connection by weak ties means that the relevance and probativeness of these weak ties are uncertain. Weak ties indicate some connection, which would cause law enforcement agents to view these ties as probative, but these ties, being weak, may imply no criminal *mens rea*.

These weak ties can also depend upon tenuous conclusions. One commentator, for example, has observed that the number of languages a person can speak might determine where he is placed in a terrorist network. This produces the problem of "fuzzy boundaries," which describes the difficulty of determining who to include and who not to include in a network, and the related "pizza delivery guy problem," which describes the difficulty of distinguishing regular interpersonal contact from significant contact. In the end, social network mapping entails the same problem associated with imputing a person's individual criminal intent based on generalizations about that person's affinity group: based on the group's perceived criminality, the individual might look guilty, but attributing criminal intent and proving criminal elements requires an individual approach.

#### III. NETWORK ANALYSIS AND ITS POSITIVE FEEDBACK LOOP

In any complex system, multiple feedback loops operate that can reinforce, cancel out, or otherwise inform one another. <sup>99</sup> An investment account in which

<sup>92.</sup> Noisy data produce errors that cause false positives and false negatives. See Paul Ohm, Broken Promises of Privacy: Responding to the Surprising Failure of Anonymization, 57 UCLA L. Rev. 1701, 1726 n.133 (2010). It does so because it contributes to a distorted or larger data set in which "[f]inding statistical significance is more difficult." See Lynn M. LoPucki & Joseph W. Doherty, Bankruptcy Vérité, 106 MICH. L. Rev. 721, 727 (2008).

<sup>93.</sup> Al Hasan, supra note 80, at 9.

<sup>94.</sup> The ability to diffuse, for example, a terrorist ideology among people depends upon weak ties, which are connections between clusters of people who are strongly tied together. See Mark Granovetter, The Strength of Weak Ties, 78 Am. J. Soc. 1360, 1366 (1973). One problem with creating terrorist social network maps is that weak ties may reflect formal connections among people, but do not necessarily indicate ideational affinity or shared criminal intent.

<sup>95.</sup> Hayes, supra note 58, at 2.

<sup>96.</sup> Al Hasan, supra note 80, at 3.

<sup>97.</sup> Krebs, supra note 65, at 44.

<sup>98.</sup> Bohannon, supra note 52.

<sup>99.</sup> Carol Ormand, *What Constitutes a Complex System?*, ON THE CUTTING EDGE, http://serc.carleton.edu/NAGTWorkshops/complexsystems/introduction.html#systems (last visited Jan 10, 2014).

the dividends and interest are set to automatically be reinvested is an example of a positive feedback loop. The account holder contributes assets to the account, increasing the stock of money that resides in the account. That account produces dividends and interest, which, instead of depleting the stock of money, flows back into the account. Assuming no change in the account holder's contributions or the flow of dividends and interest, the account size will increase exponentially.

To illustrate further, consider an investment account in which the account holder contributes x amount of funds. The account earns dividends and interest, which are set to be returned to the account holder. Furthermore, the account holder has arranged for his bills to be paid automatically from this account, all of which total x. This is a stable feedback loop because, although the stock of money in the account is affected by inflows and outflows, the stock remains at the same level.

A multi-part positive feedback loop operates in the system of law enforcement when general law enforcement is intertwined with counterterrorism moves. <sup>100</sup> This entanglement entails widespread surveillance and intelligence-gathering networks, <sup>101</sup> the international exchange of biometric and biographic data on suspected criminals, <sup>102</sup> United Nations-sponsored agreements, <sup>103</sup> interagency information sharing, <sup>104</sup> massive data-mining, often with the help of commercial database companies, <sup>105</sup> potential overreach as a result of religious profiling, <sup>106</sup> and other information exchanges. <sup>107</sup>

<sup>100.</sup> Beau D. Barnes, Confronting the One-Man Wolf Pack: Adapting Law Enforcement and Prosecution Responses to the Threat of Lone Wolf Terrorism, 92 B.U. L. Rev. 1613, 1632 (2012); See generally David S. Kris, Law Enforcement as a Counterterrorism Tool, 5 J. NAT'L SECURITY L. & POL'Y 1 (2011); Matthew C. Waxman, Police and National Security: American Local Law Enforcement and Counterterrorism After 9/11, 3 J. NAT'L SECURITY L. & POL'Y 377 (2009).

<sup>101.</sup> Craig Roush, Quis Custodiet Ipsos Custodes? Limits on Widespread Surveillance and Intelligence Gathering by Local Law Enforcement After 9/11, 96 MARQ. L. REV. 315, 318 (2012).

<sup>102.</sup> Steven C. Bennett, Storm Clouds Gathering for Cross-Border Discovery and Data Privacy: Cloud Computing Meets the U.S.A. Patriot Act, 13 SEDONA CONF. J. 235, 250 (2012).

<sup>103.</sup> U.S. Dep't of State Press Release, Statement of Secretary of State Hillary Rodham Clinton, The Law of the Sea Convention (Treaty Doc. 103-39): The U.S. National Security and Strategic Imperatives for Ratification (May 23, 2012), available at http://www.virginia.edu/colp/pdf/Clinton-LOS-testimony-2012.pdf.

<sup>104.</sup> Waxman, supra note 100, at 377.

<sup>105.</sup> Elspeth A. Brotherton, Big Brother Gets a Makeover: Behavioral Targeting and the Third-Party Doctrine, 61 EMORY L.J. 555, 571-72 (2012).

<sup>106.</sup> Sahar F. Aziz, Caught in a Preventive Dragnet: Selective Counterterrorism in a Post-9/11 America, 47 Gonz. L. Rev. 429, 436, 448 (2012); Lisa Fernandez, Local Groups Allege Biased Training Colors FBI Dealings with American Muslims, SAN JOSE MERCURY NEWS, http://www.mercurynews.com/ci\_19122246 (last updated Oct. 16, 2011); Dina Temple-Raston, Terrorism Training Casts Pall over Muslim Employee, NPR (July 18, 2011, 12:01 AM), http://www.npr.org/2011/07/18/137712352/terrorism-training-casts-pall-over-muslim-employee.

These moves are certainly part of effective law enforcement, but they also contribute to feedback loops by providing expansive and diffuse data inputs that may appear to reflect criminality but in fact do not. The result is that law enforcement agencies detect and capture more criminals and terrorists, but they also produce more false positives. It remains to be seen whether the altered ratio of true positives to false positives produces a Kaldor-Hicks improvement, los and, if it does, whether the true positives are worth the cost of the false positives, both in terms of efficient and effective law enforcement and in terms of just outcomes.

# A. General Crime Mapping's Positive Feedback Loop

Crime mapping has obvious strategic advantages in assisting law enforcement agencies in deploying assets to address and, ideally, lower the crime rate. Supporting this notion, Frank Zimring, discussing New York City's dramatic crime drop, challenged the assumption that crime prevented by police on one block will simply shift to the next block. <sup>109</sup> This means that attention to the geography of crime has the potential to reduce it, rather than shift it. Detailed crime mapping should, therefore, be taken seriously as a legitimate tool of effective law enforcement.

Crime mapping's effectiveness is, however, also a source of its major criticism. It brands certain neighborhoods as crime hot spots, resulting in a higher law enforcement presence and more intensive policing. This in turn results in a higher absolute and relative crime rate, a continued mapping of that neighborhood as a crime hot spot, and further deployment of assets in that neighborhood. This produces a positive feedback loop that provides an explanation for a number of systemic inefficiencies. At the level of physical geography, it helps to explain the persistence of racial profiling in segregated communities. At the level of community groups, it explains why Muslims, wherever they reside and whatever their income level, are overrepresented as terrorism suspects.

<sup>107.</sup> Valsamis Mitsilegas, *Immigration Control in an Era of Globalization: Deflecting Foreigners, Weakening Citizens, Strengthening the State*, 19 IND. J. GLOBAL LEGAL STUD. 3, 51 (2012).

<sup>108.</sup> It would in no case produce Pareto efficiency, since any increase in accurate targeting of suspects would make the suspect worse off.

<sup>109.</sup> Franklin Zimring, *The City That Became Safe: What New York Teaches About Urban Crime and its Control*, SCI. AM. (Aug. 9, 2011) http://www.scientificamerican.com/podcast/episode.cfm?id=the-city-that-became-safe-what-new-11-08-09.

<sup>110.</sup> See Andrew Guthrie Ferguson, Crime Mapping and the Fourth Amendment: Redrawing "High-Crime Areas," 63 HASTINGS L.J. 179, 229 (2011).

<sup>111.</sup> See id. at 228.

# B. Counterterrorism's Positive Feedback Loop

Counterterrorism moves in the context of domestic criminal law are part of a much more complex system, which includes four interrelated feedback loops (A, B, C, and D, in the diagram below), which, since 9/11, have emerged in chronological sequence, and have come to reinforce each other. This system can be depicted thusly:

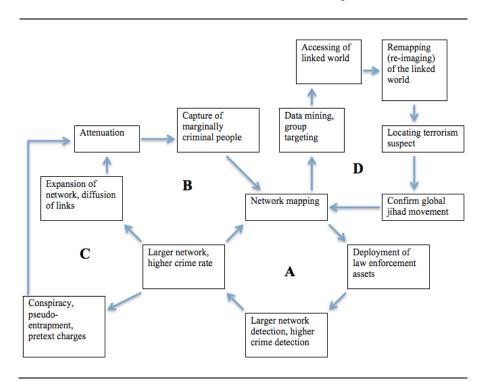


FIGURE 1: Interrelated Feedback Loops

112. Domestic counterterrorism law enforcement is not entirely distinct from general criminal law enforcement. The PATRIOT Act has little formally to do with terrorism and was a prosecutor's wish-list years in the making. See Nat Hentoff, Terrorizing the Bill of Rights: Why Should We Care? It's Only the Constitution, THE VILLAGE VOICE (Nov. 13, 2001), http://www.villagevoice.com/issues/0146/hentoff.php. Products of NSA counterterrorism surveillance are being used in general criminal investigations. See NACDL Press Release, Nation's Criminal Defense Bar Alarmed by Reports of NSA Surveillance Data Use and Intentional, Systematic Non-Disclosure in Domestic, Non-Terror-Related Criminal Cases (Aug. 5, 2013), http://www.nacdl.org/NewsReleases.aspx?id=28870. Bidirectional osmosis is occurring. Counterterrorism is, however, uniquely broad, politically and psychologically motivated and produces comparatively easy elision of traditional criminal norms. But see William J. Stuntz, The Pathological Politics of Criminal Law, 100 MICH L. REV. 505 (2001).

Part A of this feedback loop is, relative to the others, normatively untroubling because it is bounded by legitimate law enforcement moves and the detection of actual crime. To the extent that detection of actual crime informs the network, there is little internal concern (if counterterrorism moves target one group over another—say, Muslims over white separatists—then this feedback loop becomes externally concerning because it distorts the reality of terrorism and entails racial, ethnic, or religious profiling). In the wake of 9/11, it made sense to engage in network mapping and employ expansive law enforcement techniques designed to discern the contours of that network.

Valdis Krebs offered the first expression of this feedback loop in the post-9/11 era. His social network was confined to nineteen nodes, each representing one of the 9/11 hijackers, connected to each other by levels of affinity. This early, successful attempt at network mapping would result in deployment of law enforcement assets, through which a larger network, consisting of Osama bin Laden, Zachiarias Moussaoui, and many others would be added. This network mapping was normatively untroubling because the people in the network were clearly criminal, their associates who were added were clearly criminal or highly likely to be criminal, and the network was based on an actual criminal event. Quantitatively, the network map was limited to that crime.

Part B is more troubling because it quantitatively magnifies the positive loop effects. The feedback loop becomes magnified because it still captures within the network those who are active terror organization members and/or have committed actual acts intended to be addressed by counterterrorism moves, but does so on a much broader scale. What this means is that marginal players may be detected and prosecuted, whereas before, they may have gone undetected and unprosecuted.

Carley's 2002 social network map of al-Qaeda illustrates two problems with an expanded network. First, the expanded network includes people like Jose Padilla who may have had an affinity relationship with al-Qaeda and who may even have committed crimes but who are such tangential members of the group that their inclusion in the network suggests a level of involvement that is misleading or exaggerated. Second, the expanded network, based as it is on a certain level of automated data collection, contains stark inaccuracies. Carley's network, for example, includes Ariel Sharon as a member and Benjamin Netenyahu as a key player, whose elimination would undermine al-Qaeda.

This new, expansive result may not be a net good for law enforcement or public safety. Expending law enforcement resources to pursue Sharon and Netenyahu for their support of al-Qaeda is clearly a wasteful endeavor, and many of the marginal players pose no real present or future danger. Pursing

<sup>113.</sup> Philip vos Fellman, *The Complexity of Terrorist Networks*, 2 INT'L CONFERENCE ON COMPLEX SYS. (2006), http://www.necsi.edu/events/iccs6/papers/1ba0e6bb2b52fbe 3dba2218138a4.pdf; Valdis Krebs, *Uncloaking Terrorist Networks*, 7 First Monday 1 (April 1, 2002), *available at* http://www.orgnet.com/hijackers.html.

them also imposes an opportunity cost on law enforcement agents, who might have otherwise investigated truly and immediately dangerous people. It could also reduce the public's perception of the legitimacy of law enforcement moves, meaning that the public would be less likely to cooperate with law enforcement. Finally, it could lead to injustice at the margins, as small-time players are prosecuted when justice might favor exercise of prosecutorial discretion not to charge. <sup>114</sup>

Part C introduces a qualitative difference to the loop and is therefore more normatively problematic than parts A and B because it brings people into the network who, for reasons discussed below, perhaps ought not to be there.

Part C builds upon parts A and B, as law enforcement continues to pursue not only terrorists, but also their associates, and their associates' associates (the NSA shop analysis instantiates Part C). This increases the perceived size of the terrorist network, continually drawing more and more people into it. Not only does this feedback loop operate on the principle of attenuation, but this loop also invents links between defendants and terrorism networks that do not, in reality, exist. It does so through the use of conspiracy, 115 pseudo-entrapment, 116

<sup>114.</sup> These problems in the terrorism context are the same as those of attempts to thwart the drug trade and any other ongoing, complex, multiperson criminal enterprise. Marginal players in narcotics and other criminal networks have been called "small fish," Josh Bowers & Paul H. Robinson, *Perceptions of Fairness and Justice: The Shared Aims and Occasional Conflicts of Legitimacy and Moral Credibility*, 47 Wake Forest L. Rev. 211, 270 (2012), and "low-hanging fruit," Miriam Hechler Baer, *Cooperation's Cost*, 88 Wash. U. L. Rev. 903, 942 (2011), whose capture may delegitimize law enforcement efforts because small fish are easily replaceable, and may be ineffective in any event. Michael J. Ellis, Comment, *Disaggregating Legal Strategies in the War on Terror*, 121 Yale L.J. 237, 241 (2011). The relative ease with which small fish are captured also may disincentivize capture of the most culpable people because, for prosecutors, one terrorism charge equals any other for statistical purposes, but the agency costs of a big fish capture are much higher. William J. Stuntz, *The Uneasy Relationship Between Criminal Procedure and Criminal Justice*, 107 Yale L.J. 1, 28 (1997).

<sup>115.</sup> The case of Tarik Shah is illustrative. *See* Plea Agreement, United States v. Shah, 1:05-cr-00673-LAP (S.D.N.Y. Apr. 2, 2007); Indictment, United States v. Shah, 1:05-cr-00673-LAP (S.D.N.Y. Dec. 6, 2006); Alan Feuer, *Tapes Capture Bold Claims of Bronx Man in Terror Plot*, N. Y. TIMES (May 8, 2007), http://www.nytimes.com/2007/05/08/nyregion/08terror.html?pagewanted=all.

<sup>116.</sup> The case of Rezwan Ferdaus is illustrative. *See* Letter at 3, United States v. Ferdaus, No. 1:11-cr-10331-RGS (D. Mass. Oct. 31, 2012); Transcript of Detention Hearing at 9-10, 12, 14-15, 98-99, 118-19, 123, United States v. Ferdaus, No. 1:11-cr-10331-RGS (D. Mass. Dec. 9, 2011); Transcript of Detention Hearing at 50-51, 57, 59, 67, 70-71, United States v. Ferdaus, No. 1:11-cr-10331-RGS (D. Mass. Nov. 10, 2011); Indictment, United States v. Ferdaus, No. 1:11-cr-10331-RGS (D. Mass. Sept. 29, 2011); Jess Bidgood, *Massa-chusetts Man Gets 17 Years in Terrorist Plot*, N.Y. TIMES (Nov. 2, 2012), http://www.nytimes.com/2012/11/02/us/rezwan-ferdaus-of-massachusetts-gets-17-years-in-terrorist-plot.html.

and pretextual charges such as immigration violations<sup>117</sup> and false statements<sup>118</sup> that are coded as terrorism related, but are not.

Part D relies most heavily on modern data mining, targeting of groups, and Saidian Othering. 119 Part D is driven by a number of factors. The core reality of 9/11 and the terrorists involved in that attack produced the not-another-9/11 imperative, 120 which, justifiably, drove law enforcement to seek out related al-Qaeda members. Suspects who were terrorists or who would likely engage in future terrorist acts were found. They were charged with substantive crimes, and the 9/11 social network was gradually extended. Extended social networks at some point cease to be bounded criminal conspiracies and become rhetorical tropes. To the extent that this social network includes only actual terrorists, those who are likely to participate in future terrorist acts, and those tertiary

<sup>117.</sup> The case of Sami Omar al-Hussayen is illustrative. See Second Superseding Indictment at 2, United States v. Al-Hussayen, No. CR 03-0048-C-EJL (D. Idaho Mar. 4, 2004); Maureen O'Hagan, A Terrorism Case That Went Awry, SEATTLE TIMES (Nov. 22, 2004), http://infoweb.newsbank.com/iw-search/we/InfoWeb. See also DAVID COLE, ENEMY ALIENS: DOUBLE STANDARDS AND CONSTITUTIONAL FREEDOMS IN THE WAR ON TERRORISM 26 (2003); Stephen Davis, Deported from America, New Statesman, Nov. 22, 2004, at 14 ("Under US laws passed in the mid-1990s and now being strictly enforced, minor and longforgotten offences can lead to jail and eventual exile."); Mary Beth Sheridan, Immigration Law as Anti-Terrorism Tool, WASHINGTON POST, June 13, 2005, at A1 (reporting complaints that federal immigration authorities are selectively enforcing minor immigration violations for example, overstaying a visa-against Muslims and Arabs for the purpose of gaining information or detaining people who could be planning terrorist attacks); Cam Simpson et al., Immigration Crackdown Shatters Muslims' Lives, CHI. TRIB., Nov. 16, 2003, at C1 (reporting that since 9/11 there has been a 31.4% rise in removal orders for individuals from predominantly Muslim nations and only a 3.4% rise in removal orders for individuals from non-Muslim nations that compose 98% of illegal immigrants); Uniform Crime Reports: Clearances, FBI, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/clearances (last visited Jan. 10, 2014) (describing the FBI's classification scheme, which may artificially inflate the number of terrorism cases); Statement of David Martin to the National Commission on Terrorist Attacks Upon the United States, Dec. 8, 2003, http://www.9-11commission.gov/hearings/hearing6/witness martin.htm (last visited Jan. 10, 2014) (arguing that discovery of an immigration violation as a result of a terrorism investigation should not be cause for complaint).

<sup>118.</sup> See Barnes, supra note 100, at 1646-47; Aziz Z. Huq, The Signaling Function of Religious Speech in Domestic Counterterrorism, 89 Tex. L. Rev. 833, 835 (2011); Steven R. Morrison, Conspiracy Law's Threat to Free Speech, 15 U. P.A. J. Const. L. 865, 888 (2013).

<sup>119.</sup> Othering, in this context, is the process of defining one group without regard to the factual reality in order to confirm the assumed superiority of the defining group. *See* EDWARD W. SAID, ORIENTALISM 7 (1979) ("[T]here is in addition the hegemony of European ideas about the Orient, themselves reiterating European superiority over Oriental backwardness.").

<sup>120.</sup> By this term, I refer to the policy priority that the federal government has placed on avoiding another terrorist attack on the scale of 9/11. Pursuant to this priority, the government has put to the side its traditional attempts to balance public safety/national security on the one hand and individual rights/criminal law norms on the other. It has replaced this balancing effort with a risk-averse approach to policing in which, relative to the pre-9/11 era, obtaining a smaller increase in safety is worth expending a larger amount of rights and norms.

people who have taken positive actions toward actual criminal conduct, this social network and the law enforcement moves flowing from it are normatively untroubling. This normatively appropriate core, however, builds upon itself, producing part D of the loop that encompasses many other people outside of this terrorist core. From the location of an actual suspect and the reification of the global jihad movement flow two key consequences.

First, the government defines the scope of terrorist group membership more broadly, sweeping within its ambit more people. This is evident under the material support statute. While it prohibits providing material support to terrorists, courts have interpreted material support to include providing medical support, training groups to pursue their goals peacefully, and funding the social welfare aims of terrorist groups, their goals peacefully, and independently translating religious documents that *might* help a group. The tension between the freedom to associate and the imputation of group criminality persists the government imputes criminal intent to lawabiding people who may unwittingly associate with terrorists.

Second, the government becomes more imaginative in its law enforcement efforts, engaging in pseudo-entrapment, <sup>129</sup> charging people with sometimes

- 121. 18 U.S.C. §§ 2339A, 2239B (West 2013).
- 122. United States v. Shah, 474 F. Supp. 2d 492 (S.D.N.Y 2007).
- 123. Holder v. Humanitarian Law Project, 130 S. Ct. 2705 (2010).
- 124. United States v. El-Mezain, 664 F.3d 467 (5th Cir. 2011).
- 125. United States v. Taleb-Jedi, 566 F. Supp. 2d 157 (E.D.N.Y. 2008).
- 126. Second Superseding Indictment, United States v. Mehanna, No. 1:09-cr-10017-GAO (D. Mass. June 17, 2010).
- 127. Liat Levanon, *Criminal Prohibitions on Membership in Terrorist Organizations*, 15 New Crim. L. Rev. 224, 274 (2012) ("The law has not yet managed to find an appropriate equilibrium in its treatment of membership in terrorist organizations.").
- 128. National Commission on Terrorist Attacks upon the United States, Monograph on Terrorist Financing: Staff Report to the Commission 9 (Aug. 21, 2004), http://govinfo.library.unt.edu/911/staff\_statements/911\_TerrFin\_Monograph.pdf (The 9/11 Commission observed, "In many cases, we can plainly see that certain nongovernmental organizations (NGOs) or individuals who raise money for Islamic causes . . . are 'linked' to terrorists through common acquaintances, group affiliations, historic relationship, phone communications, or other such contacts. Although sufficient to whet the appetite for action, these suspicious links do not demonstrate that the NGO or individual actually funds terrorists and thus provide frail support for disruptive action, either in the United States or abroad.").
- 129. See Superseding Indictment, United States v. Aref, No. 1:04-cr-402-TJM (Sept. 29, 2005); Stephen Downs, From Sting to Frame-Up: The Case of Yassin Aref, in WASHINGTON REPORT ON MIDDLE EAST AFFAIRS (Sept./Oct. 2007); Carl Strock, Verdict Is In, but Who Is Really Guilty?, DAILY GAZETTE, Oct. 12, 2006, http://www.nepajac.org/Strock.htm (Regarding the Aref case, writing, "[g]uilty of conspiring to do something that the two probably did not understand, that in any event they never dreamed of doing until an FBI undercover operative tricked them into it (an exchange of checks for cash) and that they were so sure was OK they insisted on putting it in writing."); see also United States v. Cromitie, 727 F.3d 194, 199 (2d. Cir. 2013) (Defendant's arrest "resulted from an elaborate sting operation conducted by the FBI using an undercover informant" who "was convicted of fraud based on his misconduct as a translator working at the Motor Vehicles Bureau in Al-

tenuous conspiracy crimes, <sup>130</sup> charging people with pretextual crimes such as false statements <sup>131</sup> and immigration crimes, <sup>132</sup> applying novel and expansive

bany. To avoid being deported, [the informant] agreed to cooperate with the Government's investigation of another individual. In the spring of 2007, [he] became a paid informant of the FBI and started working in the lower Hudson Valley."); United States v. El-Hindi, 2009 WL 1373268, at \*1 (N.D. Ohio May 15, 2009) (El-Hindi, along with co-conspirators Mohammed Zaki Amawi and Wassim Mazloum, was convicted of conspiracy to provide material support. A government operative, Darren Griffin, urged the defendants "to be trained in guerilla-style skills and tactics for the purpose of either going to the Middle East-probably Iraq—to engage in hostile acts against American forces."); Feuer, supra note 115; Rick Perlstein, How FBI Entrapment is Inventing 'Terrorists'—and Letting Bad Guys Off the Hook, ROLLING STONE (May 15, 2012), http://www.rollingstone.com/politics/blogs/nationalaffairs/how-fbi-entrapment-is-inventing-terrorists-and-letting-bad-guys-off-the-hook-20120515; Eric Schmitt & Charlie Savage, In U.S. Sting Operations, Questions of Entrapment, N. Y. TIMES (Nov. 29, 2010), http://www.nytimes.com/2010/11/30/us/politics/ 30fbi.html?pagewanted=all; Mary Beth Sheridan, Hardball Tactics in an Era of Threats, WASH. POST, Sept. 3, 2006 [hereinafter Hardball] (Ali Asad Chandia was sentenced to fifteen years, and his trial "focused on favors he did for an acquaintance who belonged to a Pakistani group on the U.S. terrorist list. Chandia drove the visitor around the D.C. suburbs and helped him ship packages abroad.").

130. See United States v. Al-Arian, 514 F.3d 1184 (11th Cir. 2008) (After his acquittal on terrorism charges, Sami Al-Arian agreed to plead guilty to a lesser charge and be deported. It's more accurate to say "substantive terrorism charges" because he pleaded guilty to conspiring to provide material support.); United States v. Kassir, 2009 WL 2913651, \*3 (S.D.N.Y.) (Government expert testifying that, despite having no connection to al-Qaeda, "If you follow the same methodology and the same ideology, then you too can be al-Qaeda."); United States v. Amawi, 552 F. Supp. 2d 669, 671 (N.D. Ohio 2008) (Defendants charged with conspiracy to provide material support to terrorism by distributing "how to" videos and obtaining videos from the Internet even though "[t]he government [did] not allege that any organized terrorist or insurgent organization solicited the defendants to commit the crimes charged to them."); United States v. Al-Arian, 280 F. Supp. 2d 1345 (M.D. Fla. 2003) (In which a former University of South Florida professor was charged to providing political and economic support to terrorists and being part of a conspiracy to commit murder abroad, launder money, and obstruct justice. The government produced over 100 witnesses and 400 transcripts of telephone conversations over ten years of investigation. The jury acquitted, and one juror said that there was absolutely no evidence of any wrongdoing on the part of Al-Arian.); Hiroshi Fukurai & Richard Krooth, The Establishment of All-Citizen Juries as a Key Component of Mexico's Judicial Reform: Cross-National Analyses of Lay Judge Participation and the Search for Mexico's Judicial Sovereignty, 16 Tex. Hisp. J. L. & Pol'y 37, 43 (2010); Feuer, supra note 115; Indictment, United States v. Shah, supra note 115.

131. See Indictment, United States v. Mehanna at 1, 1:09-cr-10017-GAO (D. Mass. Jan. 15, 2009) (in material support case, original charge was for making a false statement); Barnes, supra note 100, at 1646-47; Huq, supra note 118; Morrison, supra note 118.

132. See Turkmen v. Ashcroft, 915 F. Supp. 2d 314, 325 (E.D.N.Y. 2013) (noting that, pursuant to the government's detention policy, Arab and Muslim non-citizens "were rounded up and detained on their immigration violations so government officials could question them in connection with the ongoing investigation of the 9/11 attacks (the 'PENTTBOM investigation'); they were treated as 'of interest' to the PENTTBOM investigation, which meant that they were deemed to be potential terrorists despite the fact that they had been arrested based on immigration violations, not on suspicion of terrorist activity; they were subject to a hold-until-cleared policy, under which they were held for lengthy periods of times [sic]—often for months after they were ordered removed from the country—until the FBI affirma-

interpretations of crimes such as providing material support to terrorists, and arresting people as material witnesses. <sup>133</sup>

These moves expand the scope of the global jihad movement and confirm and reinforce its supposed reality.<sup>134</sup> This movement, therefore, takes on evidentiary value independent of its individual actors.<sup>135</sup> This means that evidence of the movement is often admissible.<sup>136</sup> There is little that defendants can do to rebut this evidence: in the face of suspicious and unpopular reading materials and a movement associated with terrorism, it is difficult for a defendant to argue the absence of criminal intent. When the charge is conspiracy, evidentiary rules disadvantage the defendant,<sup>137</sup> and where pseudo-entrapment or pretextu-

tively cleared them of suspicion of wrongdoing; and they were held until their release in extremely restrictive conditions of confinement").

133. Ashcroft v. Al-Kidd, 131 S. Ct. 2074 (2011) (ruling on a Bivens action against former Attorney General, alleging defendant created practice under which federal materialwitness statute was unlawfully employed to investigate or preemptively detain him for suspected terrorist activities.); United States v. Awadallah, 349 F.3d 42, 44 (2d Cir. 2003) ("This appeal, which arises from the government's investigation of the September 11, 2001 terrorist attacks, presents questions about the scope of the federal material witness statute and the government's powers of arrest and detention thereunder."); United States v. Warsame, 488 F. Supp. 2d 846, 861 (D. Minn. 2007) ("Warsame argues that his arrest pursuant to the material witness warrant was without probable cause, that this arrest must therefore be quashed, and that his statements must be suppressed as fruits of an unlawful arrest."); United States v. Padilla, 2006 WL 3678567, \*11 (S.D. Fla. 2006) (noting that an FBI agent "told Defendant that he did have a material witness arrest warrant but that he would rather have him volunteer the information rather than serve him with it."); Mayfield v. Gonzales, 2005 WL 1801679, \*7 (D. Or. 2005) ("Plaintiffs allege that Mayfield was arrested on a material witness warrant because FBI officials, including the four individual defendants, 'caused a false and misleading material witness arrest affidavit to be filed in the U.S. District Court for the District of Oregon."); Higazy v. Millennium Hotel and Resorts, 346 F. Supp. 2d 430, 439 (S.D.N.Y. 2004) (approving "a material witness arrest warrant for Higazy based upon an affidavit of Special Agent Bruno testifying to Higazy's possible possession of information bearing on the September 11, 2001 attacks."); After his acquittal on terrorism charges, Sami Al-Arian agreed to plead guilty to a lesser charge and be deported. He was scheduled to be released in April 2007, but immigration authorities treated him as a material witness and imprisoned him for an additional year and a half for refusing to testify before a grand jury about a group of Muslim suspects. Aziz, *supra* note 106, at 439.

134. This is not to say that a sociological reality that is global, conceived in jihad, and directed at a goal or set of goals—thus can be called a movement—does not exist. This is to say that law enforcement's *perception* of that reality is exaggerated and inaccurately defined.

135. See In re Terrorist Attacks on September 11, 2001, 714 F.3d 659, 667 (2d Cir. 2013); Am. Freedom Def. Initiative v. Suburban Mobility Auth. for Reg'l Transp., 698 F.3d 885, 889 (6th Cir. 2012); United States v. Elmardoudi, 611 F. Supp. 2d 864, 866 (N.D. Iowa 2007).

136. Yates v. United States, 354 U.S. 298, 339 (1957) (Black, J., concurring in part and dissenting in part); Second Superseding Indictment at 17, United States v. Mehanna, No. 1:09-cr-10017-GAO (D. Mass. June 17, 2010).

137. Krulewitch v. United States, 336 U.S. 440, 446 (1949) (Jackson, J., concurring); United States v. Dellosantos, 649 F.3d 109, 125 (1st Cir. 2011); Note, *The Objects of Criminal Conspiracy—Inadequacies of State Law*, 68 HARV. L. REV. 1056, 1056 (1955) (noting that conspiracy law allows prosecutors to sidestep certain technical impediments to conviction).

al charges brought the defendant to court, there may in fact be factual guilt, but not the level of culpability the charge presumes or that the charge's connotations imply.

The global jihad movement's expansion encourages law enforcement to engage in further data mining and group targeting. These two concepts are similar in that they have law enforcement performing wide sweeps of conduct to uncover criminal activity. Group targeting is aesthetically more troubling because it is associated with racial profiling, <sup>138</sup> but data mining is more pernicious because of its prevalence, intrusiveness, and secrecy. 139 The series of data mining and collection structures mentioned above are used to collect massive amounts of data and organize them around the not-another-9/11 imperative and global jihad movement. They inform how law enforcement accesses the linked world: with an inherent confirmation bias, agents believe in and look for cyberjihad, online terrorism radicalization, and dots that connect terrorists. This remaps, or re-imagines, the linked world, which discerns people and conduct not along traditional evidentiary lines (can a crime be proven?), constitutional lines (is conduct protected?), or normative lines (should a person be prosecuted?), but pursuant to an expansive prevention imperative. Based on this re-mapping, law enforcement increasingly focuses on the groups and communities from which prior suspects have come. 140 Because the 9/11 attackers were defined along religio-political lines, subsequent suspects overwhelmingly are Muslims, who often, but not always, express discontent with American policies (but probably do so at a rate no higher than the American population at large). 141 Investigations tend to reengage racial, ethnic, or religious profiling. Along with false positives, these investigations also uncover some amount of actual or possible crime, and produce suspects, thus further feeding part D of the loop.

#### IV. COMPONENTS OF THE COUNTERTERRORISM LOOP

The counterterrorism feedback loop, like others, in theory includes stabilizers that limit its reinforcement, positive drivers that reinforce the loop, and negative drivers that undermine the loop. It is questionable whether these elements exist to ensure that traditional justice-bearing criminal law norms are met.

<sup>138.</sup> Lucas McMillen, Eye on Islam: Judicial Scrutiny Along the Religious Profiling/Suspect Description Reliance Spectrum, 4 U. St. Thomas L.J. 114, 116 (2006).

<sup>139.</sup> See Margaret B. Hoppin, Overly Intimate Surveillance: Why Emergent Public Health Surveillance Programs Deserve Strict Scrutiny Under the Fourteenth Amendment, 87 N.Y.U.L. Rev. 1950, 1970 (2012).

<sup>140.</sup> See Ferguson, supra note 110, at 229.

<sup>141.</sup> CHARLES KURZMAN, MUSLIM-AMERICAN TERRORISM IN THE DECADE SINCE 9/11, 2 (2012) ("[T]he rate of radicalization [among Muslim Americans] is far less than many feared in the aftermath of 9/11."); Richard Cohen, *Rep. Peter King's Hearings on Islamic Radicalization: Fuel for the Bigots*, WASH. POST (Mar. 8, 2011), http://www.washingtonpost.com/wp-dyn/content/article/2011/03/07/AR2011030703896.html.

#### A. Stabilizers

Stabilizers are parts of a system that regulate its inputs and outflows to ensure both a manageable flow and preferred outcomes. In the criminal justice system, stabilizers are supposed to ensure systemic efficiency (plea bargains, for example, are important stabilizers) and just outcomes (plea bargains are also controversial because they may lead to unjust outcomes). Typical stabilizers in criminal law feedback loops include evidentiary rules, constitutional rules, public policy, and public sentiment. In theory, these stabilizers should limit the extent to which the counterterrorism feedback loop self-reinforces, and do so in ways that promote the discovery of truth and production of fairness. In practice, in the domestic counterterrorism law enforcement context, it is unclear that any of the existing stabilizers do so to the degree they normatively should.

Evidentiary and constitutional rules are supposed to ensure that relevant, probative, fair evidence is admitted at trial and evidence that would lead either away from the truth or would result in procedural injustice is excluded. These rules normally have the external effect of guiding law enforcement agents to abide by the law and obtain relevant evidence fairly and guiding prosecutors to use their discretion to prosecute when the evidence is good and forego prosecution when it appears that the evidence would not be substantially usable.

In the post-9/11 War on Terror, the government often elides these evidentiary and constitutional stabilizers through the use of conspiracy charges, pretextual immigration or material witness arrests, reference of defendants to military tribunals, or indefinite detention as enemy combatants. Secretive FISA warrants, National Security Letters, and surreptitious collection of big data (which reflects Justice Alito's Fourth Amendment concern in *United States v. Jones* <sup>142</sup>) also contribute to this elision. In the best of times, evidentiary and constitutional standards are not always met. The stakes in the post-9/11 era appear higher, justifying additional elision of stabilizing standards. <sup>143</sup>

Public policy and public sentiment in the War on Terror evoke similar policy and sentiments as those during the Red Scare of the 1950s and the drug wars of the 1980s and 1990s. In all three periods, public policy and sentiment were shaped by a persistent fear of a massive, but poorly discernable, entity that threatened the fabric of the country. Communists were thought to be moving against every town in America, large and small, from their headquarters abroad. Inner city drug gangs occupied a land just as foreign, romanticized, and stereotyped at the foreign communist hive and Edward Said's *Orient*. Just as the Cold War was real, and narcotics certainly a problem, the 9/11 attacks provided a genuine basis upon which to build smart counterterrorism law en-

<sup>142.</sup> United States v. Jones, 132 S. Ct. 945, 957 (2012) (Alito, J., concurring).

<sup>143.</sup> See generally David Cole & James X. Dempsey, Terrorism and the Constitution: Sacrificing Civil Liberties in the Name of National Security (2002).

<sup>144.</sup> See generally LEON BING, DO OR DIE (1991).

<sup>145.</sup> See generally SAID, supra note 119.

forcement policy. The not-another-9/11 imperative, felt by both governmental actors and private citizens, drove that policy.

The strength of the imperative provides no internal stabilizing force (as indicated by passage of the PATRIOT Act, its 2005 amendment, and the current troubling use of its business records provision to obtain massive amounts of telephone call data), and so it has contributed to the positive feedback loops. In response to the recent revelations about NSA surveillance, there has been unprecedented pushback, with members of Congress calling for legislation that would limit the NSA, <sup>146</sup> scale back PATRIOT Act provisions, and throw some light on secretive FISA court proceedings. <sup>147</sup> It remains, however, to be seen whether government and society will modify their response to the not-another-9/11 imperative to promote individual rights and just outcomes while continuing to protect against future terrorist attacks.

The presence of defense attorneys also serves as a stabilizing force, in that they are responsible for ensuring not only that constitutional and evidentiary rules are followed, but also that defendants have an opportunity to counter any evidence that is legally admitted. FISA courts, however, permit no defense counsel, and attorneys for Guantánamo detainees have been restricted in what they can discuss with their clients and have discovered that their attorney-client conversations were being recorded by camp guards. <sup>148</sup>

Limited law enforcement resources have also traditionally played a stabilizing role. Justice Alito, concurring in the Supreme Court's recent GPS tracking case, *United States v. Jones*, wrote,

In the pre-computer age, the greatest protections of privacy were neither constitutional nor statutory, but practical. Traditional surveillance for any extended period of time was difficult and costly and therefore rarely undertaken. . . . Only an investigation of unusual importance could have justified such an expenditure of law enforcement resources. Devices like the one used in the present case, however, make long-term monitoring relatively easy and cheap. 149

The Seventh Circuit, similarly, was concerned that new technologies posed new threats to Fourth Amendment privacy because "fantastic [technological] advances" give "the police access to surveillance techniques that are ever

<sup>146.</sup> Spencer Ackerman & Paul Lewis, *Congress Eyes Renewed Push for Legislation to Rein in the NSA*, THE GUARDIAN (Aug. 2, 2013), http://www.theguardian.com/world/2013/aug/02/congress-nsa-legislation-surveillance.

<sup>147.</sup> Aaron Blake, *Leahy Proposes New Oversight of Surveillance Programs*, WASH. POST, (June 24, 2013), http://www.washingtonpost.com/blogs/post-politics/wp/2013/06/24/leahy-proposes-new-oversight-of-surveillance-programs.

<sup>148.</sup> Letta Tayler, Attorney-Client Privilege? Not at Gitmo: The Perverse Rules Governing the September 11 Trials, New Republic (June 28, 2013), http://www.newrepublic.com/article/113691/guantanamo-bay-defendants-attorney-client-privilege-joke.

<sup>149. 132</sup> S. Ct. 945, 963-64 (2012) (Alito, J., concurring).

cheaper and ever more effective."<sup>150</sup> Finally, Maryland Supreme Court Chief Judge Murphy observed the relationship between privacy rights and surveillance costs, writing, "In *every* Fourth Amendment decision, a citizen's privacy interest could have been more fully protected had the state adopted a more expensive alternative."<sup>151</sup>

#### B. Positive Drivers

The interaction among a number of factors comprises a set of loop drivers. They include the not-another-9/11 imperative, systemic complexity (including al-Qaeda's disruption and atomization), confirmation bias, perceived and actual law enforcement successes, lack of competition in law enforcement, and a feedback loop operating among terrorists.

The September 11, 2001, attacks produced the not-another-9/11 imperative. This imperative requires that the domestic law enforcement apparatus take extraordinary steps to prevent another terrorist attack on the scale of 9/11. While constitutional, normative, and policy limitations on these efforts exist (such as the Fourth Amendment and citizens' concerns over privacy invasions), the not-another-9/11 imperative has increased people's comfort with government intrusions, <sup>152</sup> permitted the passage of laws like the USA PATRIOT Act, <sup>153</sup> shifted Fourth Amendment analyses in court, <sup>154</sup> changed FBI policies regarding how the agency treats First Amendment protected activities, <sup>155</sup> and facilitated support for racial profiling. <sup>156</sup> It has also driven the prevention paradigm of counterterrorism law enforcement, which seeks to prevent crime before it happens, <sup>157</sup> and so entails controversial conspiracy charges, pseudoentrapment, and pretextual immigration and false statement charges.

- 150. United States v. Garcia, 474 F.3d 994, 998 (7th Cir. 2007).
- 151. Gadson v. State, 668 A.2d 22, 33 (Md. 1995) (Murphy, C.J., dissenting).
- 152. Jean Anne Tipps, Constitutional Law-Fourth Amendment Search and Seizure—Government Surveillance, Developing Technology, and Constitutional Protection, 80 Tenn. L. Rev. 211, 231 (2012); Kam C. Wong, The USA Patriot Act: A Policy of Alienation, 12 MICH. J. RACE & L. 161, 199-200 (2006).
- 153. Paul Ohm, *The Argument Against Technology-Neutral Surveillance Laws*, 88 TEX. L. Rev. 1685, 1712-13 (2010).
- 154. Turkmen v. Ashcroft, 915 F. Supp. 2d 314 (E.D.N.Y. 2013); United States v. Ramos, 591 F. Supp. 2d 93, 104 (D. Mass. 2008); Dara Jebrock, *Securing Liberty: Terrorizing Fourth Amendment Protections in a Post 9/11 World*, 30 Nova L. Rev. 279 (2006).
  - 155. Aziz, *supra* note 106, at 436, 438-41.
  - 156. Sharon L. Davies, *Profiling Terror*, 1 OHIO St. J. CRIM. L. 45, 46-51 (2003).
- 157. Robert M. Chesney, *The Sleeper Scenario: Terrorism-Support Laws and the Demands of Prevention*, 42 HARV. J. ON LEGIS. 1, 26-30 (2005); Alberto Gonzales, U.S. Att'y Gen., Stopping Terrorists Before They Strike: The Justice Department's Power of Prevention, Prepared Remarks at the World Affairs Council of Pittsburgh (Aug. 16, 2006), *available at* http://www.justice.gov/archive/ag/speeches/2006/ag\_speech\_060816.html (calling the prevention of terrorism "a meaningful and daily triumph").

Domestic counterterrorism law enforcement is highly complex. This systemic complexity impacts the positive feedback loops in a few ways. First, operations affected by positive feedback loops tend decreasingly over time to fit with reality. Data could inform these operations, but complexity hinders learning from data. Second, complexity prevents us from seeing the feedback loops inherent in a system. Third, complexity, because it hinders learning, promotes confirmation biases, which allows positive feedback loops to persist. Part of confirmation biases includes thinking that is "static, narrow, and reductionist." This is not to cast blame on law enforcement; production of confirmation biases are inherent in human thinking because we all are boundedly rational, especially when operating in dynamic systems.

The United States' success in fighting al-Qaeda has introduced an additional complicating factor. Prior to and just after 9/11, al-Qaeda was a hierarchical, organized, formal structure, not unlike a corporation. The United States' successes in disrupting and atomizing al-Qaeda have produced al-Qaeda 2.0, which is decentralized, cellular, and spontaneous—spread less by formal recruitment and more by an idea. It is much more difficult to recognize and counter such an organization, and adds complicating factors such as lone wolf terrorists, the possible danger of online recruitment, and doubt as to the organizational source of any terrorist attack.

Complexity<sup>164</sup> and "experiential urgency"<sup>165</sup> both breed confirmation bias. In PTSD patients, this experiential urgency was the perception of threat, which forced the patients into survival mode.<sup>166</sup> In this mode, subjects tend to interpret or even seek out evidence that supports their existing expectations,<sup>167</sup> even if those expectations are that they will be attacked. Just as they will seek out confirmatory information, they will also avoid information that disconfirms their perception of threat.<sup>168</sup>

At the collective level, 9/11 can be said to be the United States' triggering event. Since the attacks, law enforcement has operated in a sustained survival mode. It suffers from confirmation bias, and therefore produces "context-

<sup>158.</sup> John D. Sterman, Learning from Evidence in a Complex World, 96 Am. J. Pub. Health 505, 506 (2006).

<sup>159.</sup> Id.

<sup>160.</sup> Id. at 513.

<sup>161.</sup> Id. at 506.

<sup>162.</sup> *Id*. at 510.

<sup>163.</sup> United States v. Kassir, No. 04 Cr. 356, 2009 WL 2913651, at \*3 (S.D.N.Y. 2009).

<sup>164.</sup> Sterman, supra note 158.

<sup>165.</sup> Claude M. Chemtob et al., Anger Regulation Deficits in Combat-Related Post-Traumatic Stress Disorder, 10 J. of Traumatic Stress 17, 23 (1997).

<sup>166.</sup> *Id*.

<sup>167.</sup> Keith A. Findley, *Tunnel Vision*, *in* Conviction of the Innocent: Lessons from Psychological Research 303, 307-08 (Brian L. Cutler ed., 2012).

<sup>168.</sup> *Id.*; see also Özge Pala & Jac A.M. Vennix, A Causal Look at the Occurrence of Biases in Strategic Change (unpublished manuscript) (on file with author).

inappropriate" responses to events. One such response is the view that Muslims and others from the Middle East present a threat that justifies targeting them as a group. 170

Confirmation bias also contributes to positive feedback loops because confirmatory evidence builds confidence in a pre-existing strategy and inhibits the ability to change. As the commitment to a strategy continues through time, confidence in that strategy increases, resulting in increased commitment to the strategy and to the search for even more confirmatory evidence.<sup>171</sup> And so, confirmation bias drives the positive feedback loop, but the feedback loop also drives the confirmation bias.<sup>172</sup>

Confirmation bias produces perceived, self-reinforcing law enforcement successes, <sup>173</sup> as it entails conspiracy charges, pseudo-entrapment, and pretextual charges. The heuristics associated with biased thinking lead to systematic errors, failure to update belief sets, underestimation of uncertainty, and excessive crediting of salient evidence. <sup>174</sup> It is possible that operation of confirmation biases increases the rate of false positives and false negatives. <sup>175</sup> Confirmation bias also, however, may produce more true positives because those subject to the bias are hypersensitive to threats. <sup>176</sup> Discovery of these true positives drives positive feedback loops and immunizes them somewhat from criticism. Given the not-another-9/11 imperative, people may be more comfortable with a larger ratio of false positives to true positives than they would be otherwise. <sup>177</sup>

<sup>169.</sup> Chemtob et al., supra note 165, at 22.

<sup>170.</sup> John D. Sterman, Communicating Climate Change Risks in a Skeptical World, 108 CLIMATIC CHANGE 811, 816 (2011) (in survival mode, we tend to look for evidence "consistent with prior beliefs rather than potential disconfirmation."). This racially and ethnically based confirmation bias may help explain why FBI profilers looked for Islamist terrorists after the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City, AMNESTY INTERNATIONAL, THREAT AND HUMILIATION: RACIAL PROFILING, DOMESTIC SECURITY, AND HUMAN RIGHTS IN THE UNITED STATES 24 (Sept. 2004), available at http://www.amnestyusa.org/pdfs/rp\_report.pdf, and a lone Caucasian shooter during the Beltway sniper attacks in 2002; Elsbeth Bothe, Facing the Beltway Snipers, Profilers were Dead Wrong, The Balt. Sun (Dec. 15, 2002), http://articles.baltimoresun.com/2002-12-15/entertainment/0212160297\_1\_van-zandt-serial-killers-snipers.

<sup>171.</sup> Pala & Vennix, supra note 168.

<sup>172.</sup> Sterman, *supra* note 158, at 510 ("The self-reinforcing feedback between expectations and perceptions has been repeatedly demonstrated . . . . Often, however, the mutual feedback of expectations and perception blinds us to the anomalies that might challenge our mental models and lead to deep insight.").

<sup>173.</sup> Pala & Vennix, supra note 168.

<sup>174.</sup> Sterman, supra note 158, at 510; Sterman, supra note 170, at 816.

<sup>175.</sup> Findley, supra note 167, at 6; see also Pala & Vennix, supra note 168.

<sup>176.</sup> Chemtob et al., supra note 165, at 23.

<sup>177.</sup> It is beyond the scope of this Article to determine this ratio or its baseline, or to make a normative argument that the true positives are worth or not worth the cost of the false positives. That is, of course, an important question of systemic justice that has been and continues to be addressed. See John Ashcroft & John Ratcliffe, The Recent and Unusual Evolution of an Expanding FCPA, 26 NOTRE DAME J.L. ETHICS & PUB. POL'Y 25, 28 (2012); Nora V. Demleitner, Immigration Threats and Rewards: Effective Law Enforcement Tools in the

To summarize this process, consider a study of military veterans suffering from PTSD. The Based on the trauma they experienced in war, their survival mode of functioning was often activated in inappropriate contexts. Their survival mode entailed a threat-confirmation bias, increased vigilance, and a feedback loop that tended to validate the engagement of their survival mode. Not only could they more efficiently recognize a threat, but also they often actually sought re-exposure to threatening situations. As they were re-exposed, their anger and aggression increased, which encouraged them to perceive the presence of a threat. From this, one might discern a collective positive feedback loop that proceeds thusly: 9/11 attacks→citizenry and government primed to perceive a threat→engaged survival mode→anger→confirmation bias toward perception of threat→perception of threat→citizenry and government primed to perceive a threat.

The leap from individual mental processes to a collective process is not so far fetched; individual processes make up collective ones, and confirmation biases and feedback loops operate throughout the criminal justice system and elsewhere. They impinge upon processes of seeking confessions from suspects, interpreting suspects' statements as inculpatory, production of false confessions, encouraging jailhouse snitches to testify falsely, and encouraging forensic technicians to interpret ambiguous data to support theories of guilt. Even when presented with DNA evidence disproving the guilt of a suspect, "prosecutors sometimes persist in their guilt judgments and resist relief for the defendant." One study found that fingerprint experts were influenced to interpret fingerprints consistently with other information provided to them prior to their forensic analysis. 186

Furthermore, domestic counterterrorism law enforcement moves do not entail positive feedback loops in isolation, nor do they respond only to imagined threats. They also respond to actual terrorist groups, which operate in their own

<sup>&</sup>quot;War" on Terrorism?, 51 EMORY L.J. 1059 (2002); Richard E. Myers II, Challenges to Terry for the Twenty-First Century, 81 Miss. L.J. 937, 955 (2012); Colin Watterson, Note, More Flies with Honey: Encouraging Formal Channel Remittances to Combat Money Laundering, 91 Tex. L. Rev. 711, 723 (2013).

<sup>178.</sup> Chemtob et al., supra note 165.

<sup>179.</sup> *Id*. at 22.

<sup>180.</sup> Id. at 23.

<sup>181.</sup> Id.

<sup>182.</sup> Id. at 29.

<sup>183.</sup> Kevin Kinghorn, Spiritual Blindness, Self-Deception and Morally Culpable Non-belief, 48 HEYTHROP J. 527, 534 (2007) (finding that confirmation bias in thinking about spiritual belief); Findley, supra note 167, at 17 (finding that confirmation bias exists in financial decision-making and medical diagnoses).

<sup>184.</sup> Findley, supra note 167, at 2.

<sup>185.</sup> Id. at 10 (citing Daniel S. Medwed, The Zeal Deal: Prosecutorial Resistance to Post-Conviction Claims of Innocence, 84 B.U. L. REV. 125 (2004)).

<sup>186.</sup> Id. at 17 (citing I.E. Dror et al., Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications, 156 FORENSIC SCI. INT'L 74 (2006)).

feedback loops. One commentator has discussed such a feedback loop, observing that the loop is "predicated on the idea that when a terrorist ideology acts as a meaning-giving construct, it may result in events that increase the existential anxiety it was intended to relieve and reinforce the original ideology." Law enforcement or military responses to terrorist groups, such as arrests, less drone strikes, less country invasions, less and actual or perceived human rights violations can only feed existential anxiety about terrorists, and thus the feedback loop. In the end, then, law enforcement feedback loops and terrorist feedback loops reinforce each other.

## C. Negative Drivers

Negative drivers operate in any system to undermine feedback loops. In the absence of countervailing positive drivers, negative drivers would end a systemic loop. For example, if Congress withheld all funding to the border patrol, the system of arrests at the border and subsequent deportations would end. In our age of overcriminalization and oversentencing, negative drivers that check feedback loops that result in more defendants and higher sentences <sup>192</sup>—even as crime rates are falling <sup>193</sup>—seem hard to come by. This generalized problem exists especially in the terrorism context, as the positive drivers operate to defeat

<sup>187.</sup> Megan K. McBride, The Logic of Terrorism: Existential Anxiety, the Search for Meaning, and Terrorist Ideologies, 23 TERRORISM & POL. VIOLENCE 560, 561 (2011).

<sup>188.</sup> Neil MacFarquhar, A NATION CHALLENGED: FAMILY LEGACY; 2 Sons of Imprisoned Sheik Took Up the Taliban Cause, N.Y. TIMES, Nov. 30, 2001, at A1.

<sup>189.</sup> See Robert F. Worth et al., Drones Strikes' Risks to Get Rare Moment in the Public Eye, N.Y. TIMES (Feb. 5, 2013), http://www.nytimes.com/2013/02/06/world/middleeast/with-brennan-pick-a-light-on-drone-strikes-hazards.html.

<sup>190.</sup> Scott Atran, *To Beat al Qaeda, Look to the East*, N.Y. TIMES (Dec. 13, 2009), http://www.nytimes.com/2009/12/13/opinion/13atran.html.

<sup>191.</sup> See Nicolo Nourafchan, Judging Torture: Lessons from Israel, 43 GEO. J. INT'L L. 1259, 1266 (2012); Gwynne L. Skinner, Roadblocks to Remedies: Recently Developed Barriers to Relief for Aliens Injured by U.S. Officials, Contrary to the Founders' Intent, 47 U. RICH. L. REV. 555, 594 (2013).

<sup>192.</sup> Correctional Populations in the United States, 1996, BUREAU OF JUSTICE STATISTICS 1 (Apr. 1, 1999), http://www.bjs.gov/content/pub/pdf/cpu96ex.pdf (approximately 500,000 adults in prison in the United States in 1985; over 1,000,000 in 1996); E. Ann Carson & William J. Sabol, Prisoners in 2011 1 (Dec. 1, 2012), http://www.bjs.gov/content/pub/pdf/p11.pdf (over 1,500,000 prisoners in 2011).

<sup>193.</sup> Edward L. Glaeser & Joshua D. Gottlieb, *Urban Resurgence and the Consumer City*, 43 URB. STUD. 1275, 1288-93 (2006); Emma Schwartz, *Crime Rates Shown to Be Falling*, U.S. NEWS & WORLD REP. (June 11, 2008), http://www.usnews.com/news/national/articles/2008/06/11/crime-rates-shown-to-be-falling; *Falling Crime Rates Challenge Long-Held Beliefs*, NPR (Jan. 3, 2012 1:00 PM), http://www.npr.org/2010/01/03/144627627/falling-crime-rates-challenge-long-held-beliefs; FBI, *Preliminary Semiannual Uniform Crime Report*, *Jan.-June 2011*, FBI.GOV, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/preliminary-annual-ucr-jan-jun-2011 (last visited Jan. 10, 2014).

the effectiveness of any potential negative drivers. There are two negative drivers that are specific to the domestic counterterrorism law enforcement context.

One commentator has offered that "top-down regulation" can break up a feedback loop. <sup>194</sup> Examples of top-down regulation in traditional criminal law include the requirement of Miranda warnings and the constitutional right to a jury trial. In the former case, law enforcement agents initially resisted Miranda; <sup>195</sup> later they found that it worked to their favor because most suspects still talked after being given warnings <sup>196</sup> and, by giving the warnings, courts' default opinion was that confessions were knowing, voluntary, and intelligent. <sup>197</sup> In the latter case, plea bargains and associated systemic concerns have effectively elided defendants' recourse to juries, as ninety-seven percent of federal cases end in a plea. <sup>198</sup>

In both cases, top-down constitutional regulations were worked around to meet law enforcement agents' and prosecutors' perceived needs. In the former, agents use subtle coercion and other tactics to obtain Miranda waivers. In the latter, prosecutors engage in charge and fact bargaining to secure plea deals. While suspects still enjoy procedural rights under Miranda and the Sixth Amendment, agents and prosecutors are able to create an environment in which suspects erroneously believe that they have an incentive to talk or to plead guilty.

In domestic counterterrorism law enforcement, there is little top-down regulation. The not-another-9/11 imperative drives the executive and legislative branches, and the judicial branch has issued very few opinions that propose to slow down or stop feedback loops. Aside from ruling that the right to habeas corpus applied to Guantánamo detainees (a decision with marginal consequences for domestic counterterrorism law enforcement), <sup>199</sup> the Supreme Court has been remarkably unhelpful. The Court did reassert the protection of unpopular speech in *Holder v. Humanitarian Law Project*, but did so at the cost of some speech that might actually have decreased terrorist violence. <sup>200</sup> This case, furthermore, has not proven to be an effective deterrent to expansive prosecu-

<sup>194.</sup> Chemtob et al., supra note 165, at 23.

<sup>195.</sup> Lawrence Herman, The Supreme Court, the Attorney General, and the Good Old Days of Police Interrogation, 48 OHIO ST. L.J. 733, 736-37 (1987).

<sup>196.</sup> Paul G. Cassell & Bret S. Hayman, *Police Interrogation in the 1990's: An Empirical Study of the Effects of* Miranda, 43 UCLA L. REV. 839, 860 tbl.3 (1996) (83.7% waiver rate); Richard A. Leo, *Inside the Interrogation Room*, 86 J. CRIM. L. & CRIMINOLOGY 266, 276 tbl.3 (1996) (78.29% waiver rate).

<sup>197.</sup> See Welsh S. White, Miranda's Failure to Restrain Pernicious Interrogation Practices, 99 Mich. L. Rev. 1211, 1217-21 (2001).

<sup>198.</sup> Gary Fields & John R. Emshwiller, *Federal Guilty Pleas Soar as Bargains Trump Trials*, WALL St. J., Sept. 24, 2012, at A1, *available at* http://online.wsj.com/news/articles/SB10000872396390443589304577637610097206808.

<sup>199.</sup> Hamdan v. Rumsfeld, 548 U.S. 557 (2006); Hamdi v. Rumsfeld, 542 U.S. 507 (2004); Rasul v. Bush, 542 U.S. 466 (2004).

<sup>200.</sup> Holder v. Humanitarian Law Project, 130 S. Ct. 2705 (2010).

tions. One reason is that conspiracy charges are used in ways that elide First Amendment concerns.<sup>201</sup> Another reason is that lower courts have been sympathetic to government arguments that speech can comprise material support to terrorists.<sup>202</sup>

Another commentator has discussed confirmation bias and feedback loops in the context of private companies, offering that feedback loops theoretically can continue to support low-fit strategies unabated, but that in practice, intercompany competition forces individual companies to adapt to their environments or be defeated. In the business of domestic counterterrorism law enforcement, however, there is little or no competition—the state has a monopoly. In fact, any interagency competition that might have existed prior to 9/11 has been criticized as stovepiping that prevents sharing of important data. This stovepiping also certainly produced suboptimal outcomes, and the move to interagency cooperation probably improved the system of law enforcement. However, the decreased level of competition that resulted may have blunted the improvement to some degree.

# CONCLUSION: NATIONAL SECURITY VS. LOCALISM

There is no easy way to address the problems associated with the counterterrorism feedback loop, because the causes are many and unique. The attack on 9/11 provided a legitimate event upon which to build a counterterrorism infrastructure, and ongoing real threats justify its persistence. Fear-laden psychological reactions have persisted and have fed that infrastructure. <sup>205</sup> Politicians and media have often found advantages in stoking these fears. <sup>206</sup> There are no easy answers. One suggestion, however, is to adopt a local approach to domestic counterterrorism, similar to what Aziz Huq<sup>207</sup> and Matthew Waxman<sup>208</sup> advocate.

National security tends to be outward and distance looking. Post-9/11 law enforcement moves have been coded as national security, either as military ac-

<sup>201.</sup> Epton v. New York, 390 U.S. 29, 31 (1968) (Douglas, J., dissenting); Morrison, *supra* note 118.

<sup>202.</sup> See United States v. Mehanna, 669 F. Supp. 2d 160, 162 (D. Mass. 2009); Second Superseding Indictment at 2, United States v. Al-Hussayen, No. CR 03-0048-C-EJL (D. Idaho Mar. 4, 2004).

<sup>203.</sup> Pala & Vennix, supra note 168.

<sup>204.</sup> Nathan Alexander Sales, *Share and Share Alike: Intelligence Agencies and Information Sharing*, 78 GEO. WASH. L. REV. 279, 281 (2010).

<sup>205.</sup> See generally Aziz Z. Huq, The Political Psychology of Counterterrorism, 9 ANNUAL REV. L. & SOC. SCI. 71 (2013).

<sup>206.</sup> Id.

<sup>207.</sup> Aziz Z. Huq, The Social Production of National Security, 98 CORNELL L. Rev. 637 (2013).

<sup>208.</sup> Matthew C. Waxman, *National Security Federalism in the Age of Terror*, 64 Stan. L. Rev. 289 (2012).

tions or federal counterterrorism efforts directed from Washington.<sup>209</sup> Over time, it became apparent that expansive terrorist structures, instantiated in the spread of ideology rather than institutional structure and the encouragement of lone wolf, homegrown operators rather than cells connected to a center, required a mirroring law enforcement response. That response includes calls for more local responses, is coded as traditional law enforcement, and is a relatively novel approach.<sup>210</sup>

William Stuntz's work suggests that this localist approach may produce greater justice, <sup>211</sup> for a number of reasons.

First, when localities must fund law enforcement efforts, they tend to seek fiscal efficiencies, and as the recent budget-motivated reduction of the prison population in California<sup>212</sup> (which was reinforced by a later Supreme Court ruling ordering the reduction in prison populations<sup>213</sup>) attests, cost savings can produce justice and a nuanced justice system can be less expensive than an expansive tough-on-crime approach.

Second, jurors who are drawn from defendants' communities may be more aware of the positive impact that defendants—despite their crimes—may have on their communities, as family members, workers, friends, and so forth. Local jurors may, therefore, be more willing to treat prosecutions with a critical eye, or even to nullify when justice so demands. 215

Third, local control over law enforcement and criminal justice may increase their perceived legitimacy because prosecutors and cops are more closely tied to communities. Increased communication between government and the populace produces both more cooperation in uncovering dangerous suspects

<sup>209.</sup> See Jillian Rayfield, Graham, McCain: Hold Boston Suspect as Enemy Combatant, SALON (Apr. 20, 2013), http://www.salon.com/2013/04/20/graham\_mccain\_hold\_boston\_suspect\_as\_enemy\_combatant (describing U.S. Senators' desire to hold alleged Boston Marathon bomber as an enemy combatant, despite fact that the suspect's ties to terrorism or terrorist groups was, at the time, unknown).

<sup>210.</sup> See Huq, supra note 207; Waxman, supra note 208.

<sup>211.</sup> WILLIAM J. STUNTZ, THE COLLAPSE OF AMERICAN CRIMINAL JUSTICE 285-309 (2011).

<sup>212.</sup> Randal C. Archibold, *California, in Financial Crisis, Opens Prison Doors*, N.Y. TIMES (Mar. 23, 2010), http://www.nytimes.com/2010/03/24/us/24calprisons.html? pagewanted=all&\_r=0.

<sup>213.</sup> Brown v. Plata, 131 S. Ct. 1910 (2011).

<sup>214.</sup> United States v. Gorodetsky, 288 F.R.D. 248 (E.D.N.Y. 2013); People v. Towns, No. 3-11-0621, 2012 WL 7007013, at \*4 (Ill. App. Ct. Nov. 6, 2012); State v. Ramirez, No. M2009-01617-CCA-R3-CD, 2011 WL 2348464, at \*25 (Tenn. Crim. App. June 8, 2011).

<sup>215.</sup> Paul Butler, Racially Based Jury Nullification: Black Power in the Criminal Justice System, 105 YALE L.J. 677, 679 (1995) ("For pragmatic and political reasons, the black community is better off when some nonviolent lawbreakers remain in the community rather than go to prison. The decision as to what kind of conduct by African-Americans ought to be punished is better made by African-Americans themselves, based on the costs and benefits to their community, than by the traditional criminal justice process, which is controlled by white lawmakers and white law enforcers.").

and more nuance by not arresting or prosecuting where forbearance seems the better course, as it often is. It has become abundantly clear that in the counter-terrorism context, good relations between the FBI and local Muslim communities are vital. <sup>216</sup>

Conversely, nationalized criminal justice tends to produce law enforcement approaches that contain a number of inefficiencies.<sup>217</sup>

First, nationalized criminal justice tends to be politicized.<sup>218</sup> Since prohibition, the media and national political figures have used a perpetual crime wave<sup>219</sup> to justify their existence. Whether the concern was alcohol, communism, drugs, or terrorists, nationalized crime moves respond not solely to demands of justice or nuanced policy needs, but also to politicized fears that are rarely reflective of reality. Relative to the actual danger, inordinate amounts of resources have been directed at these concerns.<sup>220</sup>

Second, nationalized criminal justice tends to dehumanize offenders by viewing them not as people or community members, but merely as criminals. This approach discounts the value of leniency and dismisses alternative sentencing as an ineffective attempt at rehabilitation and an elision of retributivist principles.

<sup>216.</sup> Sally Howell, (*Re*)bounding Islamic Charitable Giving in the Terror Decade, 10 UCLA J. ISLAMIC & NEAR E.L. 35, 62-63 (2011).

<sup>217.</sup> Peter C. Carstensen, Buyer Cartels Versus Buying Groups: Legal Distinctions, Competitive Realities, and Antitrust Policy, 1 WM. & MARY BUS. L. REV. 1, 14 (2010) (discussing "the inefficiencies of a central management trying to coordinate retailing operations in a number of diverse and dispersed local markets."); Clayton P. Gillette, Fiscal Federalism, Political Will, and Strategic Use of Municipal Bankruptcy, 79 U. CHI. L. REV. 281, 310 (2012) (discussing "recent literature that analyzes how the inability of central governments to control local debt for which it has at least implied responsibility causes substantial overspending and inefficiencies at both national and subnational levels"); William F. Pedersen, Regulation and Information Disclosure: Parallel Universes and Beyond, 25 HARV. ENVIL. L. REV. 151, 151 (2001) ("Proponents of social cost disclosure programs claim they empower communities and citizen groups to address the problems disclosure reveals without the inefficiencies and the overriding of local preferences that inevitably attend national regulation.").

<sup>218.</sup> STUNTZ, *supra* note 211, at 191.

<sup>219.</sup> Katherine Beckett, Setting the Public Agenda: "Street Crime" and Drug Use in American Politics, 41 Soc. Probs. 425, 425 (1994) (arguing that politicians and the mass media play crucial roles in generating public concern about crime); Luz A. Carrion, Rethinking Expungement of Juvenile Records in Massachusetts: The Case of Commonwealth v. Gavin G., 38 New Eng. L. Rev. 331, 364 (2004); Mark Fishman, Crime Waves as Ideology, 25 Soc. Probs. 531, 531 (1978) (arguing that "crime waves" are largely creations of the news media); Jerome H. Skolnick, Passions of Crime, Am. Prospect, Mar.-Apr. 1996, at 89 (claiming that policymaking on crime is driven more by symbolism, culture, and politics than by evidence or logic).

<sup>220.</sup> See Daniel Kahneman, Thinking, Fast and Slow 143 (2011).

<sup>221.</sup> See Albert W. Alschuler, The Failure of Sentencing Guidelines: A Plea for Less Aggregation, 58 U. Chi. L. Rev. 901, 902-03 (1991) (noting that the "aggregation" of criminal law cases under the federal sentencing guidelines, in the form of high mandatory minimum sentences, led to a harm-based penology that "dehumanized the sentencing process.").

Third, nationalized criminal justice tends to be blind to local needs and concerns. Disgruntled members of the American populace who may tend toward terrorist conduct probably do not do so for the same reasons, or in the same ways. The missing Somali teens in Minneapolis in 2009, thought to have joined Al Shabaab;<sup>222</sup> lone wolves who took criminal action, like the Times Square would-be bomber Faisal Shahzad;<sup>223</sup> those who responded to a government sting and may be mentally ill, like Rezwan Ferdaus;<sup>224</sup> and those who responded to a government sting based on arrogant anger, like Tarik Shah,<sup>225</sup> would all probably respond differently to different interventions. Managing the domestic war on terror from Washington, as has been the case,<sup>226</sup> may not produce the nuanced justice that traditional criminal law demands. It is unclear, furthermore, that centralized policing ensures public safety more than localized approaches. It is clear, however, that the positive feedback loop engendered by massive, centralized policing creates inefficiencies and unjust outcomes.

<sup>222.</sup> Michael Martin & Dina Temple-Raston, *Somali Teens Go Missing in Minneapolis*, NPR (Feb. 2, 2009, 12:00 PM), http://www.npr.org/templates/story/story.php?story Id=100135879.

<sup>223.</sup> *Id*.

<sup>224.</sup> Bidgood, supra note 116.

<sup>225.</sup> Feuer, *supra* note 115 (describing a jazz bassist, charged in a plot to provide close-combat training and medical assistance to al-Qaeda, as "a boastful, albeit somewhat bumbling, man, an almost inconceivable mix of bassist, ninja and would-be terrorist," who called himself "doggone deadly").

<sup>226.</sup> Ronald D. Lee & Paul M. Schwartz, *Beyond the "War" on Terrorism: Towards the New Intelligence Network*, 103 MICH. L. REV. 1446 (2005) (describing counterterrorism moves as secretive, centralized in the Bush Administration, violative of civil liberties, and as military, rather than criminal justice actions). *But see* USDOJ, *Joint Terrorism Task Force*, DEP'T OF JUSTICE, http://www.fbi.gov/about-us/investigate/terrorism/terrorism\_jttfs (last visited Jan. 10, 2014) (describing JTTFs as "small cells of highly trained, locally based, passionately committed investigators, analysts, linguists, SWAT experts, and other specialists from dozens of U.S. law enforcement and intelligence agencies").