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THESIS

**BEYOND REFORM:
BETTER POLICING THROUGH SYSTEMS THINKING**

by

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March 2021

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BETTER POLICING THROUGH SYSTEMS THINKING**

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Submitted in partial fulfillment of the
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ABSTRACT

Police reform is a long-standing objective in America. In one form or another, the same fundamental problem persists: police have never consistently navigated the tension between effectively policing society and being a part of it. In part, systems theory helps explain why traditional best-practice reforms have not been consistently effective. The solution to these problems may lie not in reform but in reframing the approach to police organizations through systems thinking. This thesis seeks to answer a key question predicated on the assumption that reform is not enough: How can systems thinking improve policing? Using gap analysis, this thesis identifies ways to improve American policing and its processes through application of systems theory, specifically systems thinking. This research considers some of the problems that face policing from a systems-thinking perspective and finds that managing systems structures, building agent capacity, understanding context and goal-setting, and pursuing feedback could improve policing in ways that traditional reform strategies have not. Finally, it recommends that law enforcement agencies adopt systems-thinking strategies to improve performance.

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LIST OF ACRONYMS AND ABBREVIATIONS

APD	Austin Police Department
BPD	Bakersfield Police Department
CALEA	Commission on Accreditation for Law Enforcement Agencies
CHOP	Capitol Hill Organized Protest
CompStat	computer comparison statistics
DOJ	Department of Justice
MCPD	micro-community policing plans
NYPD	New York City Police Department
OVP	officer of violence prevention
PTSR	policy, training, supervision, and review
QA	quality assurance
QAU	Quality Assurance Unit
SPD	Seattle Police Department
SPF	Singapore Police Force
TQL	total quality leader
TQM	total quality management

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EXECUTIVE SUMMARY

Police reform is a long-standing tradition in America.¹ Nevertheless, in one form or another, a fundamental problem persists: police have never consistently navigated the tension between effectively policing society and being a part of it.² Policing failures cost human lives, polarize people, have devastating financial and social consequences, and erode the institution's legitimate authority. Perhaps the cure does not lie within the oft-prescribed medicine of traditional reform but rather in reframing the approach to police organizations through systems thinking.

This thesis seeks to answer a key question: How can systems thinking improve policing? Using gap analysis as a research method, it seeks to identify ways to improve policing and its processes through systems thinking. Gap analysis is a sound research methodology because the ideal state of policing is well documented, as is the current state. What lies between them, the gap, is the essence of this research.³

Systems thinking is a way of thinking about problems, such as policing, that are messy, non-linear, and fraught with uncertainty. It provides a way of addressing problems that have these characteristics in their own problem space. Thinking about the world as systems is a departure from the mechanistic—that is, a linear, simplistic view of problem-solving that dominates police reform. Instead of viewing the problems plaguing police and society from the reductionist approach to “fixing” policing that has dominated the problem space since its inception, this work attempts to examine whole systems, their behaviors, and their interaction with the world.

This research explores how thinking differently about law enforcement might change its structures and practices to render the need for traditional reform obsolete. It

¹ See, for example, Stephen Rushin, “Federal Enforcement of Police Reform,” *Fordham Law Review* 82, no. 6 (May 2014): 3189–3248.

² Department of Justice, *The Civil Rights Division's Pattern and Practice Police Reform Work: 1994–Present* (Washington, DC: Department of Justice, 2017).

³ Gary O. Langford et al., *Gap Analysis: Rethinking the Conceptual Foundations*, Report No. NPS-GSBPP-8-008 (Monterey, CA: Naval Postgraduate School, 2008), 19, <https://calhoun.nps.edu/handle/10945/609>.

explores opportunities for law enforcement to repurpose many existing structures and practices, along with some innovations to expand its systems' scope. The goal is to inform ways that might help create unbiased, neutral, consistent, legal, and ethical policing and, as a result, improve long-term resiliency.

A systems-based approach might prove more useful than traditional police reform in resolving many of the recurring issues that hamper policing in the United States. Much of reform focuses on creating high reliability in police systems without addressing the issues that create the problems in the first place, and many of the fixes put in place as part of reform programs have the effect of constraining the system even further.⁴ Drawing from the extensive literature on reliability, this thesis demonstrates a systems approach that incorporates the philosophical framework underpinning total quality management could improve police performance by creating monitoring structures to capture and measure feedback from inside and outside the system.

One of the core tenets of traditional police reform is to focus on the training and education of police officers.⁵ Nevertheless, the current approach to improving performance through training and education is short-sighted and inadequate for improving policing in the long term. Reform scholars struggle to understand police officers' behavioral inconsistencies and how best to capture and replicate positive behaviors while eradicating undesirable ones.⁶ This research demonstrates that a solution to these problems may be in building the learning capacity of system agents—police officers. Improved capacity improves the agents' response to the events and behaviors that occur within the system. Generative learning, the deep-learning cycle, reflection in action, and tacit knowledge improve system performance. Their essential processes are learning and analyzing what is learned from past experiences and synthesizing that learning with future behavior. An organization's ability to assess its problem and system spaces, capabilities, strengths, and

⁴ Samuel Walker and Carol A. Archbold, *The New World of Police Accountability*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2014), 5, 182–83; Robert E. Worden and Sarah J. McLean, *Mirage of Police Reform: Procedural Justice and Police Legitimacy* (Berkeley: University of California Press, 2017), 206.

⁵ President's Task Force on 21st Century Policing, *Final Report of the President's Task Force on 21st Century Policing* (Washington, DC: Community Oriented Policing Services, 2015).

⁶ Worden and McLean, *Mirage of Police Reform*, 193–96.

weaknesses is central to its ability to adapt or change to best suit its environment's complexity or volatility.

A system's context—that is, its environment—can confuse the system's goals and prevent them from functioning as designed. Better goal-setting and an awareness of the constraints environments will improve system performance. Police organization executives and leadership, who aware of their environments, can improve performance and set achievable goals. A way forward is to divest from sociological problems while acknowledging their impact on several systems. Policing could maintain “tactical agency” over the act of policing while developing a “strategic voice” to serve as its influence among the many competing influences with which it finds itself often engaged.⁷ By considering goals of policing differently, the system of policing can better serve its needs. A unified goal might help establish a standard to measure police conduct across the board and standardize expectations of America's police.

In most ways, America's police fail to couple well with communities, social groups, and people, limiting their organizational resilience. Better feedback may be the bridge to better trust. Feedback is vital to systems, and feedback mechanisms are like sensors in a community. One way to increase the feedback response is to open system boundaries and pursue feedback from other systems. Feedback is the key to creating resiliency.

Police organizations are systems but more than that; no matter the size, they are connected as a larger system. Each bears an intrinsic responsibility to the others to learn to perform in a way that not only serves its own purposes but benefits the larger system as a whole. The stakes are huge. One need look no further than the George Floyd incident to see that a single call for service can affect every single police organization in the United States for years to come.

There are four significant conclusions drawn from the research in this thesis:

⁷ David H. Bayley, Michael A. Davis, and Ronald L. Davis, “Race and Policing: An Agenda for Action,” in *New Perspectives in Policing* (Washington, DC: National Institute of Justice, 2015), <https://www.ncjrs.gov/pdffiles1/nij/248624.pdf>.

1. Creating a platform for managing and sustaining the flow of information within and about police systems to connect executives and agents with information about the system could improve all aspects of policing.
2. Improving agents' competency within a police system will improve the system's behavior and bolster its structure.
3. Understanding how system context affects police systems and how policing impacts its environments can improve policing in the United States.
4. As systems, police organizations must learn to recognize the value of feedback. Engaging feedback can create social resilience and connect with people to improve relationships.

The findings and conclusions of this thesis led to the following recommendations:

1. Implement a systems approach to police organization management.
2. Explore opportunities to expand agent capacity through police systems thinking and systems management training at every practitioner and executive level for all police officers in America.
3. Learn to become more thoughtful in approaching police system environments, and set goals accordingly.
4. Pursue wide-reaching internal and external sensors touching every aspect of the system's performance.

In the aftermath of the homicide of George Floyd, police organizations worldwide are being forced to reimagine the way they think about policing, managing police organizations, and policing outcomes. This thesis sought to research whether applying systems thinking principles would improve police organizations' performance and resiliency over the currently employed traditional reform strategy. It sought to understand why American policing performs as it does and how understanding systems' behavior, especially complex systems, might help explain why policing—as a system—often struggles to do what it intends. More than that, it identified points of leverage to improve

policing not only in the abstract but in ways that police organizations can utilize to improve themselves. Ultimately, it found that systems thinking may be the way forward for policing to improve meaningfully—not in the reactive frame of yet another policing disaster, but meaningfully, reflexively, and continuously, in ways that traditional reform strategies never have.

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The serendipity that led to this undertaking is, even yet, hard to grasp. As it happens, I believe in the divine providence of an almighty God to whom I am eternally grateful for it all. During times of great personal and professional strife, the research within this thesis tested my resolve and my beliefs in ways unexpected. I often questioned my qualifications to write it and my ability to present what I found. Nevertheless, in the words of the strange genius Hunter S. Thompson, “Buy the ticket, take the ride.” I did my best.

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my beloved soulmate, Kimmy Bagby, I am nothing without you, and I want nothing without you. Thank you for everything. You are my best, all or nothing.

I. INTRODUCTION

Police reform is a long-standing tradition in America.¹ Since Theodore Roosevelt's first significant police reform efforts at the end of the 19th century, Presidents Hoover, Nixon, George H. W. Bush, and Obama all instituted major reform efforts to fix policing.² Federal commissions, initiatives, and statutes designed to address failures of American policing have been reexamined for more than a century. In one form or another, the same fundamental problem persists: police have never consistently navigated the tension between effectively policing society and being a part of it.³ Policing failures cost human lives, polarize people, have devastating financial and social consequences, and erode the institution's legitimate authority. Whether discussing the unrest caused in the aftermath of the Rodney King incident, the tumult following the shooting of Michael Brown, the controversy surrounding Eric Garner's demise, or the global unrest following the homicide of George Floyd, these touchstone events and the damage to society they cause represent an underlying disease in the way America polices and reforms its police.

Police reform struggles to make a long-term impact on improving policing or police agencies. Like systems thinking as a field of research in its own right does, this research represents a departure from the mechanistic view of problem-solving that, by all appearances, dominates police reform. Instead of viewing the problems plaguing police and society from the reductionist approach to "fixing" policing that has dominated the problem space since its inception, this work, through systems thinking, attempts to examine whole systems, their behaviors, and their interaction with the world. Reductionism is the idea that things can be broken down into individual parts to be understood fully. Reductionism helps create a cause-and-effect view of the world by placing the things that

¹ See, for example, Stephen Rushin, "Federal Enforcement of Police Reform," *Fordham Law Review* 82, no. 6 (May 2014): 3189–3248.

² Samuel Walker, *A Critical History of Police Reform: The Emergence of Professionalization* (Lexington Books, 1977), ProQuest; Rushin, "Federal Enforcement of Police Reform"; Paul Butler, "The System Is Working the Way It Is Supposed To: The Limits of Criminal Justice Reform," *Georgetown Law Journal* 104, no. 6 (August 2016): 1419–78.

³ Department of Justice, *The Civil Rights Division's Pattern and Practice Police Reform Work: 1994–Present* (Washington, DC: Department of Justice, 2017).

cause problems into categories, and categorizing the world helps it appear predictable and controllable.⁴

Reductionism analyzes things to find their basic components whereas a systems approach examines the whole using what Russell Ackoff has called “synthetic thinking.” He writes, “Analysis focuses on structure; it reveals how things work. Synthesis focuses on function; it reveals why things operate as they do. Therefore, analysis yields knowledge; synthesis yields understanding. The former enables us to describe; the latter, to explain.”⁵ Systems thinking came about through the acknowledgment that the world is messy, non-linear, and fraught with uncertainty. Such an approach provides a way of addressing problems that have these characteristics in their own problem space. The research in this thesis attempts to do just that—approach policing from a systems-thinking paradigm to better understand policing, its problems, and ways to improve it.

This research explores how applying systems thinking to law enforcement might change its structures and practices to render the need for traditional reform obsolete. The research determines whether law enforcement can think differently in how it maneuvers both internally and externally to develop necessary changes in pattern and practice as needs develop—rather than after failures occur. It explores opportunities for law enforcement to repurpose many existing structures and practices, along with some innovations, and expand the system’s scope to help it function better. This research aims to improve this system’s output, using systems thinking and related theories, such as learning organization theory and complexity theory. The ultimate goal is to inform ways that might help create unbiased, neutral, consistent, legal, and ethical policing and, as a result, improve long-term resiliency.

Law enforcement organizations are notoriously slow to adapt and challenging to change, in part because they are government entities fraught with bureaucratic oversight, legal issues, activist pressure, community expectations, and legislative restraints and constraints. Leveraging systems thinking and some of its outgrowths, such as

⁴ Robert C. H. Chia and Robin Holt, *Strategy without Design: The Silent Efficacy of Indirect Action* (New York: Cambridge University Press, 2009), 20; Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007), xxix–xxx.

⁵ Russell L. Ackoff, *Ackoff’s Best: His Classic Writings on Management* (New York: Wiley, 1999), 18.

organizational learning and systems management theories, particularly those that incorporate agile development and reflection, is worth exploring to improve policing practices where traditional thinking has not. This thesis questions how policing can use these cooperative concepts to become more agilely responsive to social challenges and improve performance. Doing so might eliminate the need for traditional reforms and improve the effectiveness of policing overall.

A. RESEARCH QUESTION

How can systems thinking improve policing?

B. RESEARCH DESIGN

The research question considered for this project asks whether it is possible to improve an existing structure and its processes. Modern policing and its challenges, processes, and reform methodologies are well documented by academia, professional publications, reform experts, activists, and the media, as are the desired outcomes. What lies between each is the subject of this inquiry. Langford et al. describe the function of gap analyses in their report for the Naval Postgraduate School. They write, “What you desire versus what you have is, in essence, a Gap. The Gap is as much the relationship between what is perceived to be *important* and the derived difference between performance and expectations” (original emphasis).⁶ Given this understanding of gap analysis and the research question’s scope, it is the appropriate research method of inquiry because the *gap* is the area between what people both inside and outside policing want from their police organizations and what their police do.

People expect policing to perform a certain way, but how police agencies perform does not always align. Thus, this research followed a gap analysis process: 1) established the ideal future state, 2) analyzed the current state, 3) compared the current state to the

⁶ Gary O. Langford et al., *Gap Analysis: Rethinking the Conceptual Foundations*, Report No. NPS-GSBPP-8-008 (Monterey, CA: Naval Postgraduate School, 2008), 19, <https://calhoun.nps.edu/handle/10945/609>.

future state, 4) described the gap and quantified the difference, and 5) made recommendations to bridge the gaps.⁷

The analysis scope was limited exclusively to municipal policing in the United States and the processes, attitudes, and relationships that drive it. Defining the ideal state involved identifying how the modern American police department's operations would improve by implementing a reflexive policing system that incorporated systems thinking and related strategies. The research overlaid this ideal state with modern reformed policing and the constant processes of reform to qualify or quantify whether this reflexive system has the potential to bridge the gap between current police organizations and their recurrent problems.

This study examined a broad range of literature on policing, police reform, police organizations, systems thinking, systems models, systems thinking applications for government and police, learning organizations, and their attributes, applications, models, processes, and limitations. The study also involved applying systems thinking principles to policing activities, primarily focused on strategic organizational capacities rather than operational or tactical applications. The research included examinations of a number of police organizations throughout the United States and lessons learned from their performance or response to stimuli—and how their application, intentional or otherwise, might benefit from systems thinking.

⁷ Traditional gap analysis involves creating a plan to bridge the gap. However, the complexity of policing makes “planning” in the traditional sense something of a fallacy. Instead, for this research, the analysis makes recommendations about ways to think or adopt practices that allow complexity and complex system adaptation, but no plan is proposed. Joe Weller, “The Complete Guide to Gap Analysis,” Smartsheet, October 17, 2018, <https://www.smartsheet.com/gap-analysis-method-examples>; “5 Gap Analysis Tools to Analyze and Bridge the Gaps in Your Business,” *Createfy* (blog), last modified October 21, 2020, <https://createfy.com/blog/diagrams/gap-analysis-tools/>.

II. LITERATURE REVIEW

To answer the question of how systems thinking can improving policing, there must be an understanding of the history and current state of policing and the efforts to improve it. One must also understand the foundational principles of systems and complex systems, and their application to law enforcement. This thesis analyzes American policing, generally at the organizational level, from a systems perspective. The research design seeks to identify and then bridge the gaps between police performance, society's attempts to reform it, and the desired state of policing in America. Thinking about police organizations as systems and treating them as such may prove to be that bridge.

This literature review considers efforts to improve policing in America and the current state of those efforts. It explores modern police reform, specifically pattern-and-practice reform, its effectiveness, and its future outlook. It also considers the literature on performance measurements in policing. Finally, it discusses research on systems theory applications, specifically systems thinking, along with the closely related field of learning organization theory in law enforcement organizations, and efforts to synergize these theories to improve police departments.

A. POLICE REFORM

Police reform is a well-documented, long-standing practice in America.⁸ Theodore Roosevelt is often credited with creating the modern police department through reform. The injection of his progressive reform idealism into policing created better-trained, structured, and professionalized police departments.⁹ Roosevelt's reforms, which were relatively radical in his era, have been adopted widely; it is hard to imagine policing holding any other form. Author Jay Berman, who explores the impact of Roosevelt's reform efforts, writes, "The professional model of police administration served as the ideological foundation for progressive police reform. The model may be viewed as the deliverance of

⁸ Rushin, "Federal Enforcement of Police Reform."

⁹ Jay Berman, *Police Administration and Progressive Reform* (Westport, CT: Greenwood Press, 1987), 8, 50, 77, 90, 121–122.

the gospel of efficiency to urban policing.”¹⁰ Despite Roosevelt’s significant reform efforts and those of the leaders who followed, some fundamental problems have persisted.

Historically, police reform suffers from many recurring problems. Among the most persistent complaints against America’s police are the disparity in the ways people of color and the poor get policed compared to white and upper-class people; violent tactics; and inadequate supervision, oversight, and accountability leading to corruption, illegal actions, and abuse of power.¹¹

1. Modern Reform

In many ways, the police reform of the late 20th and early 21st century introduced transparency, oversight, and accountability, along with the ideas of procedural justice, police legitimacy, and community trust to modern policing. Federal pattern-and-practice reforms, in particular, set an unofficial standard for agencies after which to model themselves.¹² They created different ways of thinking about police performance and mechanisms for measuring the way police officers behave, like early intervention systems. They challenged training, policy, and procedures to change policing for the better, creating police departments that better served their communities and were accountable to them. Much of modern reform has focused on improved organizational accountability, policy change, data analysis, and officer behavior.¹³ At its core, police reform seeks to change the behavior of police officers and police departments to improve their performance in some way.

The federal government created the primary tool used to reform policing today. In 1994, Congress passed the Law Enforcement Misconduct Statute, 42 U.S.C. § 14141,

¹⁰ Berman, 121.

¹¹ Walker, *A Critical History of Police Reform*; Rushin, “Federal Enforcement of Police Reform”; Butler, “The System Is Working”; Berman, *Police Administration and Progressive Reform*, 122.

¹² Samuel Walker and Carol A. Archbold, *The New World of Police Accountability*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2014), 48, 272.

¹³ Walker and Archbold, 21–25.

following the Rodney King incident and the national attention it garnered.¹⁴ This statute is the Department of Justice (DOJ)'s mechanism to intervene when police misconduct is rampant in state and local law enforcement agencies.¹⁵ Police reform scholars Darrell L. Ross and Patricia A. Parke write,

Section 14141 specifically authorizes the Department of Justice (DOJ) to bring a lawsuit against a police organization rather than individual officers . . . by granting authority to the DOJ to pursue equitable and declaratory relief against police engaged in a “pattern and practice” which deprives individuals of their constitutional rights.¹⁶

This law gives the DOJ oversight authority to reign in abuses of the Constitution by state and local law enforcement officials. It functions to identify police organizations that use illegal, unethical, or unconstitutional patterns and practices and intervene to reform them. The term “pattern and practice” is shorthand for the method of reform, which involves identifying patterns and practices of unconstitutional behaviors through DOJ investigations. Those patterns and practices become the focus of the investigation and the foundation of the reform platform.¹⁷ Despite the DOJ's significant authority, the Law Enforcement Misconduct Statute does not articulate the mechanism of inquiry, investigation, or intervention.¹⁸ Relatively few agencies have been investigated under this statute, and even fewer have been the subject of DOJ-mandated consent decrees via court order.¹⁹ Nevertheless, DOJ investigations and subsequent legal actions have emerged as the single most significant police reform driver in the United States.²⁰

¹⁴ Darrell L. Ross and Patricia A. Parke, “Policing by Consent Decree: An Analysis of 42 U.S.C. § 14141 and the New Model for Police Accountability,” *Police Practice and Research* 10, no. 3 (June 2009): 199–202, <https://doi.org/10.1080/15614260802381109>.

¹⁵ Department of Justice, *Pattern and Practice*, 3.

¹⁶ Ross and Parke, “Policing by Consent Decree,” 200.

¹⁷ Department of Justice, *Pattern and Practice*.

¹⁸ Ross and Parke, “Policing by Consent Decree,” 200.

¹⁹ Department of Justice, *Pattern and Practice*, 3.

²⁰ Walker and Archbold, *The New World of Police Accountability*, 48–49; Patrick A. Walsh, “A Practitioner’s Guide to Trust and Legitimacy” (master’s thesis, Naval Postgraduate School, 2013), 69–73.

The DOJ is ill-equipped to conduct wide-reaching investigations of thousands of American police departments.²¹ Instead, as scholars have pointed out, DOJ-forced reforms have put agencies across the United States on notice that all police practices are generally under review. Thus, federally mandated reforms in police departments across the United States have served as the model to follow.²² As Samuel Walker and Carol Archbold, renowned police practice scholars and prominent reformers, write in their book, “No police department should be in a position where it can be sued by the Justice Department, because the past cases make clear what is expected of them to achieve professional, bias-free, and accountable policing.”²³ Walker and Archbold articulate the accepted role of pattern-and-practice reform in American law enforcement, arguing that such reform is the best solution for solving many policing problems ranging from the constitutionality of policing to legitimacy and community engagement.²⁴ Proponents of these reforms, such as lawyer and scholar Stephen Rushin, argue that they are useful and necessary for improving American policing and ensuring police legitimacy.²⁵ They argue that police agencies require various controls, and by implementing these controls, they will begin to develop community trust and legitimacy.²⁶

Experts agree that police reform has not been successful at fixing the problems of policing in America. For example, in examining the DOJ’s 1997 consent decree in Pittsburgh, Pennsylvania, Davis et al. tout some successes in building community trust yet note that community leaders believed significant gaps might lead to failure in the long term.²⁷ In a statement before the House Judiciary Committee, the American Civil Liberties Union acknowledged the value of reform efforts, including pattern-and-practice reforms.

²¹ Rushin, “Federal Enforcement of Police Reform,” 3240–41.

²² Walker and Archbold, *The New World of Police Accountability*, 49.

²³ Walker and Archbold.

²⁴ Walsh, “A Practitioner’s Guide to Trust and Legitimacy,” 71.

²⁵ Rushin, “Federal Enforcement of Police Reform.”

²⁶ Walker and Archbold, *The New World of Police Accountability*.

²⁷ Robert C. Davis, Nicole J. Henderson, and Christopher W. Ortiz, *Can Federal Intervention Bring Lasting Improvement in Local Policing? The Pittsburgh Consent Decree* (New York: Vera Institute of Justice, 2005), 35.

However, it implored the committee to adopt more aggressive reform positions.²⁸ Sunita Patel, UCLA professor and police reform scholar, discusses the nature of police reforms under the DOJ's supervision, finding that specific reform functions are ill-conceived at best and routinely miss the mark regardless of the zeal of their adoption and enforcement.²⁹ While many of the experts above credit the pattern-and-practice model of reform with reshaping policing into the future and holding police departments accountable, many also find it lacking in different ways.

2. Why Modern Reforms Fail

Detractors of modern police reform fall into various schools of thought. First, some argue that police reform is ineffective because it does not go far enough to intervene in the criminal justice system, and reforms are ineffective because they are inconsistently applied.³⁰ As a result, oversight is insufficient to make the needed changes.³¹ Some believe that pattern-and-practice reform requires consistent reapplication and monitoring to ensure it lasts.³² As scholars and DOJ consultants who track reform efforts, Walker and Archbold argue that American policing traditionally fails because it represents the biases of local leaders and the American people at large, who are traditionally “indifferent to the goals of constitutional policing or actively hostile to the requirements of due process and equal protection.”³³ In their book, Walker and Archbold maintain that police reform successes lie in constant monitoring and oversight mechanisms, but not enough agencies are employing them.³⁴

²⁸ American Civil Liberties Union, “Written Statement of the American Civil Liberties Union before the U.S. House Judiciary Committee Oversight Hearing on ‘Policing Practices’” (New York: American Civil Liberties Union, 2019), 2, <https://docs.house.gov/meetings/JU/JU00/20190919/109952/HHRG-116-JU00-20190919-SD017.pdf>.

²⁹ Sunita Patel, “Toward Democratic Police Reform: A Vision for ‘Community Engagement’ Provisions in DOJ Consent Decrees,” *Wake Forest Law Review* 51, no. 4 (December 2016): 735.

³⁰ Butler, “The System Is Working.”

³¹ Rushin, “Federal Enforcement of Police Reform.”

³² Walker and Archbold, *The New World of Police Accountability*.

³³ Samuel Walker, “Governing the American Police: Wrestling with the Problems of Democracy,” *University of Chicago Legal Forum* (2016): 659, <http://chicagounbound.uchicago.edu/uclf/vol2016/iss1/15>.

³⁴ Walker and Archbold, *The New World of Police Accountability*, 264.

Walker and Archbold acknowledge that most reform efforts fail.³⁵ They write that the threats to the “new police accountability are many and powerful.”³⁶ The scholars claim reforms do not endure because of leadership failures, unsustainability, officers’ failure to embrace their role in reform, and police organizations’ failure to police their own effectively. They also note that changes to leadership make long-term transformations difficult.³⁷ Moreover, reforms do not “institutionalize processes for sustaining reforms over time.”³⁸ Sustaining reformed policing practices and changing officer behavior are difficult at the practitioner level.³⁹

Rushin argues for monitoring and oversight but in a different way. Specifically, he argues that pattern-and-practice reforms are only successful in the DOJ Civil Rights Division’s hands. Rushin believes that the DOJ should have its ranks reinforced and its actions multiplied to manage all pattern-and-practice reforms. Otherwise, he argues, reform efforts fail to scratch the surface.⁴⁰

The American Civil Liberties Union argues for legislative oversight. For example, it sponsors and advocates federally managed reform programs, such as the PEACE Act, a national last-resort, self-defense, and use-of-force policy that federally criminalizes any police line-of-duty shooting outside that standard.⁴¹ Those in this “old school” of reform acknowledge that reform efforts in their current state are ineffective but, generally, the pattern-and-practice reform process is a good thing—there is just not enough of it.⁴²

³⁵ Walker and Archbold, 28.

³⁶ Walker and Archbold, 270.

³⁷ Walker and Archbold, 268–70.

³⁸ Walker and Archbold, 57.

³⁹ Walker and Archbold, 41–57.

⁴⁰ Rushin, “Federal Enforcement of Police Reform,” 3243.

⁴¹ American Civil Liberties Union, “Policing Practices,” 4.

⁴² Murray Gell-Mann, “Complex Adaptive Systems,” in *Complexity: Metaphors, Models, and Reality*, ed. G. Cowan, D. Pines, and D. Meltzer (Reading, MA: Addison-Wesley, 1994), 17–19, <https://resolver.caltech.edu/CaltechAUTHORS:20150924-144445402>; Walker and Archbold, *The New World of Police Accountability*; Rushin, “Federal Enforcement of Police Reform”; Butler, “The System Is Working.”

Alternatively, author Michael Brown has found that reform bureaucracy makes policing harder to do, and strict reforms and policing the public are not necessarily congruent. Brown writes, “If there is a lesson to be learned from the most recent generation of reformers, it is that simply enveloping policemen in a maze of institutional controls without grappling with the grimy realities of police work does not necessarily promote accountability and may only exacerbate matters.”⁴³

Another group of detractors agrees about the necessity of police reform but recommends using innovative methodologies. Worden and McLean argue that modern reform, mainly procedural justice, a product of pattern-and-practice proponents, is just a repackaging of old, failed reforms such as problem-oriented or community policing.⁴⁴ They argue that police agencies, politicians, and reformers have an incongruent view of what is wrong with the American justice system and how to fix it. Moreover, they argue through a study of several reformed police agencies that the pattern-and-practice reform platform has little to no long-term impact.⁴⁵ Measuring the sentiment of a wide range of citizen groups, Worden and McLean’s study employed an analysis of six police departments to uncover why many post-reform outcomes do not match the desired effect. Their study concludes, among other things, that police reform cannot merely show some reasonable faith effort on the part of a police agency to be effective. They argue that reform needs to find more effective ways to connect police with society to repair their historically bad relationships.⁴⁶

Patel’s work makes largely this same argument. No matter how rigorous, police reform does not challenge the institution’s nature or structure and, therefore, will always fail to some degree.⁴⁷ In an article for the *Georgetown Law Review*, Butler argues that

⁴³ Michael K. Brown, *Working the Street: Police Discretion and the Dilemmas of Reform* (New York: Russell Sage Foundation, 1981), 303.

⁴⁴ Robert E. Worden and Sarah J. McLean, *Mirage of Police Reform: Procedural Justice and Police Legitimacy* (Berkeley: University of California Press, 2017), 5.

⁴⁵ Worden and McLean, 178–82.

⁴⁶ Worden and McLean, 196.

⁴⁷ Patel, “Toward Democratic Police Reform,” 793.

police reform works perfectly well as designed; the problem is not the construction of reform but the system itself. The system is inherently corrupt in its ideals and, therefore, fails regardless of the reform effort.⁴⁸ These scholars claim that accepted reform efforts fail over time because they neither directly nor indirectly address the underlying core problems. Their argument likens reform to a medical professional's treating symptoms while ignoring the disease. From their perspective, reforms seek to answer the wrong questions.

Worden and McLean argue that reforms fail for different reasons—they fail entirely to grasp the problems created by policing, and the solutions are often incomplete or miss the mark. The scholars argue that reforms fail to affect outcomes as promised and are often recycled, as the past 50 years of police reform, except for the introduction of legitimacy and procedural justice, are similar to one another.⁴⁹ Moreover, police reforms often fail because programs are superimposed on existing organizational structures, and many have competing goals.⁵⁰ Worden and McLean summarize the argument nicely: “Such prescriptions rest largely on logic and wishful thinking, and certainly not on social scientific evidence.”⁵¹

B. LAW ENFORCEMENT PERFORMANCE MANAGEMENT

Another difficulty with reform is that police managers struggle to quantify law enforcement performance. American police agencies gauge success through such methods as computer comparison statistics (CompStat), which numerically measure crime and enforcement changes throughout their police jurisdictions. Performance is connected to the rise and fall of criminal behavior and officers' productivity—that is, the number of arrests or citations issued during a target period. CompStat does not capture the quality of organizational performance nor its overall effectiveness.⁵²

⁴⁸ Butler, “The System Is Working,” 1474.

⁴⁹ Worden and McLean, *Mirage of Police Reform*, 5–7.

⁵⁰ Worden and McLean, 182–83.

⁵¹ Worden and McLean, 196.

⁵² Worden and McLean, 154–55.

Worden and McLean argue there is no systemic accountability for the performance of police officers in connecting with their communities or measurements of challenging-to-capture ideas like procedural justice in numerical-based performance metrics. They also argue that intrinsic conflicts exist in the structure of police departments, particularly the distance between managers who drive policy reform and practitioners who struggle with actual police work's volatility and danger. Practitioners give little credibility to management mandates, especially when they affect their fundamental understanding of their roles in policing.⁵³

Walker and Archbold argue that police performance, particularly in the context of reform, focuses on individual bad actors rather than the systems that create them. They assert that such focused performance critiques tend to be emotionally and politically driven and have little lasting effects while also confusing the actual problems and outcomes. The scholars argue that the measurement of policing needs to shift focus from acts of misconduct to organizational police culture.⁵⁴

Police reform and police performance management in their current states do not seem to be achieving the designed outcomes. As Walker and Archbold as well as Worden and McLean argue, reform methodology is inconsistent, and effectiveness is fleeting if reform is at all successful. Reform scholar Jay Berman captures the situation succinctly: "The challenges of improving police management, personnel, and procedures to acceptable levels consistent with complex demands of modern law enforcement remain to be overcome."⁵⁵ Systems thinking may help bridge the gap between police reform, performance management expectations, and the failure of performance.

⁵³ Worden and McLean, 150–56.

⁵⁴ Walker and Archbold, *The New World of Police Accountability*, 21–22.

⁵⁵ Berman, *Police Administration and Progressive Reform*, 122.

C. SYSTEMS AND POLICE SYSTEMS

The world is a continuum of systems.⁵⁶ All systems have elements, inputs, processes, outputs, and some form of feedback. The people in a system are called “agents” and their organizations “agencies.” Systems can have an infinite number of essential parts including interdependent or independent combinations of all different kinds. The system’s parts make up its structure, its design, and determines how it behaves. Feedback tells the system about its behavior and can come in any number of different forms, depending on the system.

Basic systems, such as home air conditioners, make systems easy to understand. In such a system, an evaporator, a blower fan, ducting, wiring, and an electricity source work together to create a specific temperature in a specific space. The ideal temperature is the system’s stock, its designed output. The ducting is its pathways, as is its wiring. The air is created by one agent, the evaporator is moved by another agent, and the blower moves the air through the ducting to the area where the system intends to control the climate. For the system to know if the temperature is ideal—too hot or too cold—requires something to report, at least periodically, about its behavior to adjust the air temperature, how much is blowing across the system, and whether the entire system is functioning as designed. In this example, the thermostat supplies feedback. Specifically, it is a balancing feedback mechanism.

There are two types of feedback mechanisms, those that balance and those that reinforce. Meadows calls balancing feedback “goal-seeking,” “regulating,” and “stabilizing.” It is feedback designed to ensure the system is doing what it intends to do, like a thermostat—balancing feedback, though it is also a source of resistance to change.⁵⁷ Balancing feedback is slow to change the closer a system believes it is to its goals.

The adage about a frog in a pan of water on a stove illustrates how balancing feedback can be problematic. The frog believes it is in no danger, and as the temperature

⁵⁶ Donella H. Meadows, *Thinking in Systems: A Primer* (White River Junction, VT: Chelsea Green, 2008), 12.

⁵⁷ Meadows, 27–30.

rises slowly, the frog knows no danger until it boils to death. Thus, the changes in the environment were difficult, if not impossible, for the frog to discern. The frog did not sense a dramatic change because the changes were slow over time, but the frog's feedback was the same. If the water changed quickly or there was a noticeable threat, the frog would have responded more quickly. This is the essence of balancing feedback. The further away the system is from its expected output, the faster it reacts. The closer it is, the slower it reacts. This is also a common system "trap" called "drifting goals" or "drifting to low performance." Such system traps and their effect on system performance are discussed in detail throughout this thesis.⁵⁸

Reinforcing feedback amplifies, grows, reinforces, and multiplies a system's output. Meadows calls it a "vicious or virtuous cycle that can cause healthy growth or runaway destruction."⁵⁹ Commercial sales is a good example of reinforcing feedback. The more desirable the product, the more the product sells. More sales made mean more money to make a more desirable product, increasing sales to exponential levels, which allow for business growth and more products and, therefore, more sales.⁶⁰ Reinforcing feedback can also cause problems when it becomes what Meadows calls "runaway" feedback. Cytokine storms are powerful, often deadly human immune responses triggered by the body's recognition of a disease. The body attacks the disease, building and multiplying its attack perpetually, ultimately causing more trouble than the underlying disease. The feedback and response overcome the body, and the immune system attacks the diseased cells and those of its host.⁶¹

Systems theory helps people understand how individual, even seemingly unrelated, distant actions, elements, or phenomena work together or against each other to create and alter outcomes. Scientists, mathematicians, engineers, and many other fields use systems

⁵⁸ "Drifting Goals: The 'Boiled Frog' Syndrome," Systems Thinker, February 20, 2016, <https://thesystemsthinker.com/drifting-goals-the-boiled-frog-syndrome/>.

⁵⁹ Meadows, *Thinking in Systems*, 30.

⁶⁰ Meadows, 31.

⁶¹ David C. Fajgenbaum and Carl H. June, "Cytokine Storm," *New England Journal of Medicine* 383, no. 23 (2020): 2255–73, <https://doi.org/10.1056/NEJMra2026131>.

theory to explain the world's complexity and the relationships, seen and unseen, between cause and effect more deeply. Systems theory also acknowledges and, in some ways, celebrates the often unexpected, emergent outcomes in complex adaptive social systems.⁶² Complex adaptive social systems are systems involving interactive human agents within a social context.

Like law enforcement agencies and their communities, some social systems include the world's most complex system phenomena—human beings interacting with other human beings. Human systems are inherently complex because they involve people as individuals and as socially delineated groups, each a system unto its own, but all systems interacting and affecting one another.⁶³ Innumerable masses divided into neighborhoods, towns, cities, race, gender, sects, religions, and infinite other relationships, across nations and globally, are inherently complex to recognize, much less manage. They are prone to failure and challenging, in the best of times, to predict.⁶⁴ System complexity is directly proportional to the vulnerability of the system. The more outputs are interdependent on the constituent parts of the system, including related micro or macrosystems, the more complex the system. The more complex the system, the more difficult it is to understand the inter- and intra-system relationships and their effect on its behavior or output.⁶⁵

There are many reasons for system faults and failures, and even in the most resilient and well-functioning systems, failures occur. Complexity guarantees even in the best of systems that failures are possible but also probable. The disparity can cause unexpected and usually negative system behaviors known as “normal accidents.”⁶⁶ Normal accident

⁶² Gell-Mann, “Complex Adaptive Systems,” 17–20; Robert L. Flood, “Liberating Systems Theory,” in *Liberating Systems Theory*, ed. Robert L. Flood, Contemporary Systems Thinking (Boston: Springer, 1990), 11–32, https://doi.org/10.1007/978-1-4899-2477-3_2.

⁶³ Vince Darley, “Emergent Phenomena and Complexity” (Cambridge, MA: Division of Applied Sciences, Harvard University, 1994).

⁶⁴ Joyce Fortune and Diana White, “Emergent or Just Unexpected?,” in *Systems Theory and Practice in the Knowledge Age*, ed. Gillian Ragsdell, Daune West, and Jennifer Wilby (Boston: Springer, 2002), 3–9, https://doi.org/10.1007/978-1-4615-0601-0_1.

⁶⁵ Meadows, *Thinking in Systems*, 86–90.

⁶⁶ Samir Shrivastava, Karan Sonpar, and Federica Pazzaglia, “Normal Accident Theory versus High Reliability Theory: A Resolution and Call for an Open Systems View of Accidents,” *Human Relations* 62, no. 9 (2009): 1363–4, <https://doi.org/10.1177/0018726709339117>.

theory is often applied to technological systems, but it applies to tightly coupled complex systems, including social systems like law enforcement. As it is used here, “tightly coupled” means the system’s components are held close together or managed carefully. Tight coupling closely manages performance to control the outcome better.⁶⁷

A competing theory is called high-reliability theory, which attempts first to prevent and second to mitigate complex system failures, also called “accidents,” through a series of system management apparatuses. For instance, in policing, these apparatuses include training, decentralized command, policy and procedures, and the like. As systems develop, the correct controls get put in place, and failures and accidents become less frequent over time. Systems learn to handle them, and the system agents learn to recognize faults or incidents, correcting them before they become chaotic.⁶⁸

This thesis focuses on three distinct fields of study: systems theory, complex adaptive systems, and systems thinking. Through their research, Dietz and Mink categorize law enforcement organizations as complex adaptive systems because they exist “nested” within other systems. They elaborate, “Another way of conceptualizing a complex system is as a large collection of simple, mutually interacting parts that is capable of exchanging stimuli and energy with its environment and capable also of adapting its internal structure as a consequence of such interaction.”⁶⁹ They demonstrate how systems thinking and understanding law enforcement as a complex adaptive system can be leveraged to understand complexity in law enforcement operations and show how constituent parts in policy, operations, and community outreach can be understood as adaptive living systems.⁷⁰ Their primer illustrates how a specific law enforcement agency—the Austin

⁶⁷ Marguerite Schneider and Mark Somers, “Organizations as Complex Adaptive Systems: Implications of Complexity Theory for Leadership Research,” *Leadership Quarterly* 17, no. 4 (2006): 355, <https://doi.org/10.1016/j.leaqua.2006.04.006>.

⁶⁸ Shrivastava, Sonpar, and Pazzaglia, “Normal Accident Theory,” 1367–9.

⁶⁹ A. Steven Dietz and Oscar G. Mink, “Police Systems and Systems Thinking: An Interpretive Approach to Understanding Complexity,” *Journal of Police and Criminal Psychology* 20, no. 1 (2005): 3.

⁷⁰ Dietz and Mink, 4.

Police Department—operates as a complex adaptive system and how it leverages complexity to the agency’s benefit.⁷¹

Dietz and Mink maintain that since the Austin Police Department and effectively all of law enforcement are intricate living systems, systems theory is a way of understanding their operations and failures and thinking about altering their course. Dietz and Mink demonstrate system phenomena such as strange attractors, unpredictable but repetitive energy-focusing system nodes within a complex adaptive system that can be leveraged to the system’s benefit or, without management, can harm the desired outputs.⁷² In layperson’s terms, leveraging relationships in the right way can benefit police systems, but mismanaging or ignoring them can have dire consequences. The work also broadly discusses how systems thinking can help law enforcement understand some of its challenges, including systemic racism, community tensions, and problems with policing subcultures.⁷³

Dietz and Mink admit the limits of their research in studying policing as a complex adaptive system. They acknowledge the design of their study as introductory, and there is significant room for additional applications of complex adaptive systems to law enforcement. Their research starts the conversation but does not delve deeply into improperly operated systems or system resiliency. The paper includes an invitation to “open the door to solutions to the persistent problems faced by communities and police departments.”⁷⁴ Dietz and Mink suggest that using systems thinking and complexity theory approaches for law enforcement’s social system may “create a better future for their clients.”⁷⁵

Much of the rest of the literature about policing as a complex adaptive system discusses the social implications of policing and crime. Understanding “policing” as a

⁷¹ Dietz and Mink, 13.

⁷² Dietz and Mink, 6.

⁷³ Dietz and Mink, 9.

⁷⁴ Dietz and Mink, 14.

⁷⁵ Dietz and Mink, 14.

complex adaptive system in this context is as much an explanation of “crime” as a complex adaptive social system. The research effectively argues that because crime is complex, so is the act of interdicting or stopping it. The role of complexity theory and systems theory provides the opportunity to see these systems as networks capable of disruption. They focus on managing fieldwork and operational considerations relating to crime and the types of crime, locales, criminals, and their connections, along with geographical and strategic implications.⁷⁶ Interdicting terror networks with international connections by arresting a pivotal character, for instance, has wide-reaching, often unforeseen consequences because disrupting cells in London might cause unexpected bolstering of cells in Belgium. The act of policing that changes the terror network may create ripples throughout the system that change how it behaves, modify the structure or the output, and alter how the police behave in response.

While the research for this thesis has little use for fieldwork applications, integrating systems and complexity theory in all walks of policing is notable as an understood, emerging way of thinking more academically about policing and its practices. The idea that systems analysis can equally inform leadership and administration—both on the fundamental and philosophical fronts, as demonstrated in Dietz and Mink’s work—while servicing operational and strategic needs demonstrates a possible way forward in how police systems manage themselves and the way they interact with the communities they police.

D. ORGANIZATIONAL FOCUS OF SYSTEMS APPLICATIONS

Given the role of police reform in this research, it is appropriate to mention a simple systems-thinking concept proposed by Walker and Archbold. Their book details a model called the policy, training, supervision, and review (PTSR) framework. It is a systems approach to police reform in that it combines individual parts of a police organization’s policy, training, and supervision with a “review” process. They frame this feedback in a

⁷⁶ Richard Leary and Jenny Thomas, “How Complexity Theory Is Changing the Role of Analysis on Law Enforcement and National Security,” in *Intelligent Management: Knowledge Driven Frameworks for Combatting Terrorism and Organized Crime* (London: Springer, 2011), 61–78.

balancing feedback loop, with agencies working through this process to improve policy, training, and supervision in police organizations to inform and create best-practice measures. He argues that “best practices” should be initially sourced from other police departments’ efforts of the same process. He argues that the best sources for best practices are agencies, informed by government-enforced consent decrees under monitors who implement the required reforms while supervising their outcomes.⁷⁷

Walker and Archbold’s approach is complicated rather than complex. It treats law enforcement organizations as simple-but-closed systems, and those internal measurements, patterned from other closed systems’ internal measurements, drive specific external outcomes. It fails to account for policing’s complex nature in the vast and varied social networks that make up society. Moreover, Walker and Archbold’s system does not address how complex systems differ, even somewhat, based on regions and social understanding or police expectations across the nation. The scholars’ PTSR framework has value within complex systems as a measurement tool for guiding internal controls, critical parts of manipulating systems. Their conclusions about how it should apply to modern policing is not reasonable, however, because it seeks simple linear solutions to complex non-linear problems without addressing the complexity that affects policing and its outcomes.

In their book *Police Leadership and Administration*, William Walsh and Gennaro Vito address the nature of 21st century policing and the ever-developing landscape that requires adaptation.⁷⁸ They address an approach of systems thinking and related features of learning organizations as part of a new management strategy to meet the operational needs of this environment. While the entire book is not devoted to the topic of systems thinking or learning organization practices, the authors claim, “Police departments that use strategic management techniques are aligning their external and internal environments through decisions based upon intelligence analysis. They are creating open-system adaptive learning organizations. Crime and public safety are problems to be analyzed and

⁷⁷ Walker and Archbold, *The New World of Police Accountability*, 16, 20, 55, 171–72.

⁷⁸ William F. Walsh and Gennaro F. Vito, *Police Leadership and Administration: A 21st Century Approach* (New York: Routledge, 2019), 5.

resolved, not something to which to react.”⁷⁹ While containing precise language relevant to this research, the claim mostly dies there, without further explanation of how to achieve such goals.

Throughout the book, Walsh and Vito discuss different leadership aspects of police organizations and the need for becoming learning organizations for strategic development, but they supply little evidence for their claims. They fail to address how such a concept might look or in what ways it could positively affect police departments. Furthermore, the claim is not supported in that the authors employ no examples of police departments that have experienced success or ways to achieve success using these ideas. In sum, there is no further mention in the entire book about learning organizations or developing the “open-system adaptive learning organization” promised.

The work of Peter Senge serves as inspiration for this and other research.⁸⁰ Dietz and Mink, who draw on Senge’s work, argue that for a policing organization to function as a complex adaptive system, it must be agile or adapt quickly to circumstances presented that might otherwise prevent the system from performing ideally.⁸¹ They note Senge’s insight that successfully manipulating systems involves understanding the problem space, responding agilely and appropriately, and adjusting within the system in ways most likely to have the desired effect.⁸²

Senge’s seminal academic work, *The Fifth Discipline*, demonstrates applications of systems thinking, reflective practice, and learning organization theory. His work draws on other critical research in this thesis, namely Donella Meadows’s *Thinking in Systems* and Donald Schön’s *The Reflective Practitioner*, to integrate systems thinking and learning organization theory, and illustrate the value of reflective practice to create an overarching strategy for organizational success. Senge expands on these sources to create a framework

⁷⁹ Walsh and Vito, 56.

⁸⁰ Walsh and Vito, 55.

⁸¹ Dietz and Mink, “Police Systems and Systems Thinking,” 11.

⁸² Dietz and Mink, 9.

for different organizations to diagnose leverage points and interact incisively with both their problems and failures to create well-ordered, consistently successful systems.⁸³

The “fifth discipline” for creating a successful complex adaptive organization, according to Senge, is systems thinking.⁸⁴ The other four disciplines of a learning organization include personal mastery, mental models, building shared visions, and team learning.⁸⁵ The four lower disciplines must be in place and foundationally understood to achieve success at the fifth discipline, systems thinking. Senge’s traditional audience is the corporate structure, free to develop at will across markets and measurements, limited only by its finances and the marketplace. Even still, Senge’s work covers numerous applications in government service—touching briefly on policing—and examples of applications in systems thinking and learning organization theory, combined with reflection in action.

A key element of Senge’s work relates to reflective practices, their role in systems thinking, and more specifically, the process of learning through reflection. He discusses how system operators often rely on reflection—an intuitive understanding about how constituent system parts interact and can be manipulated instinctively to change the outcome desirably. Despite appearances, learning through reflection on experience and practical application is a field of research that studies the innate understanding of a system by practitioners engaging with it as experts. Senge’s understanding of these phenomena draws heavily from the work of Schön.⁸⁶

Schön’s work considers the role of implicit knowledge in the practice of expert practitioners. He argues that reflective practice exists in the world and describes how a practitioner can leverage one’s expertise to react to changing environments in real time with success. Reflective practice is the idea of tacit or unspoken intuitive expertise and its

⁸³ Peter Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday, 2006), 13.

⁸⁴ Senge, 69.

⁸⁵ Senge, 5–11.

⁸⁶ Senge, 176, 253–382.

origins.⁸⁷ Schön argues that the reflective practitioner, who thinks about his practice while doing it, can build intuitive, creative solutions to problems quickly and correctly by leveraging his tacit expertise to be reflective.⁸⁸ Moreover, a reflective practitioner can test hypotheses virtually and discard problematic solutions before undesirable results occur because he can anticipate results and compare them against objectives nearly intuitively.⁸⁹ This ability helps the practitioner prevent catastrophes and take advantage of opportunities; meanwhile, non-reflective operators might hesitate and lose the initiative in either case.

Dietz and Mink's research includes elements of Schön's ideas in their discussion about the connection between systems thinking and the concept of tacit knowledge and culture as connectors and bonding agents to policing's success as complex adaptive systems.⁹⁰ They argue that the cultural implications of sound experiential knowledge are essential to sustaining system integrity. They also surmise that thinking critically and understanding the system's complexity, often unspoken products of tacit knowledge and expertise, are not supported in many police organizations.⁹¹

E. CONCLUSION

Three critical elements of the reviewed research stand out. First, many experts agree that reform in its current construction is flawed, but they disagree about how to correct it. There is virtually no literature about why policing requires routine reform or why police organizations need constant reform efforts.

Second, evidence supports the perspective that police organizations are complex adaptive systems. They can significantly benefit from combining systems thinking and learning organization theory concepts. However, little available research demonstrates how such theories might look in application. Walsh and Vito's explanation of the ideal police

⁸⁷ Donald A. Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983), 68.

⁸⁸ Schön, 164.

⁸⁹ Schön, 147.

⁹⁰ Dietz and Mink, "Police Systems and Systems Thinking," 13.

⁹¹ Dietz and Mink, 13.

department acknowledges exactly what this thesis aims to discover.⁹² System thinking, combined with learning organization strategies, may be the way forward in addressing problems in law enforcement. This thesis explores potential applications of a theoretical framework guiding the way. Dietz and Mink provide a foundational understanding of a police department as a living system, capable of being manipulated to the benefit of the agency and its clients, but admit their research leaves many avenues unexplored.

Last, in law enforcement reform literature, scholars and practitioners have integrated learning organization principles and systems thinking ideas without explaining what they mean or how they work. This thesis attempts to bridge that gap. Experts seem to agree that slow-moving bureaucratic behemoths, whatever the context, are no longer serviceable in law enforcement. Whether it be Walker's internal control manipulation, Walsh and Vito's promises of success through intelligence-led, data-driven policing, or Dietz and Mink's vision of systems thinking to reframe the industry entirely, change and adaptation are critical moving forward. Nonetheless, there are few answers for how to render that change readily available.

F. COMING ATTRACTIONS

The chapters that follow identify how systems thinking and, to an extent, learning organization theory and reflective practices can be leveraged to improve law enforcement. Chapter III discusses research on systems frameworks for managing police organizations while identifying potential applications already used by the law enforcement enterprise to improve future outcomes. Chapter IV identifies ways to use systems thinking, learning organization theory, and reflective practices to improve police performance at the practitioner level and the potential effects on the system's overall performance. Chapter V looks at the many competing contexts that affect how police systems and goal-setting combine to affect performance. Chapter VI discusses feedback, its importance to police systems, and different ways of thinking about leveraging feedback for the system's

⁹² Walsh and Vito, *Police Leadership and Administration*, 56.

good. Chapter VII synthesizes the thesis research into findings, conclusions, and recommendations for action.

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III. A FRAMEWORK FOR IMPROVING POLICE SYSTEMS MANAGEMENT

This chapter discusses police systems management from the reformed policing perspective. Additionally, it examines the nature of police systems as complex living systems—a systems thinking–based framework for managing police systems, built on the theories of profound knowledge and quality management—and examples of the framework used in policing systems. The aim of this chapter is to determine the benefits of applying a systems-thinking approach to police systems management.

A. HIGH RELIABILITY AS A DISABILITY

In many ways, police reform of the late 20th and early 21st century introduced transparency, oversight, and accountability, along with the ideas of procedural justice, police legitimacy, and community trust, to modern policing. Federal pattern-and-practice reforms, in particular, set an unofficial standard for agencies after which to model themselves.⁹³ Much of modern reform focuses on improved organizational accountability, policy change, data analysis, and officer behavior.⁹⁴ At its core, police reform seeks to improve police officers' and police departments' behavior and performance.

Whether they understand what it means or not, reformers and executives of police agencies know that the most reliable systems are tightly coupled. Tightly coupled means closely managed to control system aberrations and emergence as much as possible.⁹⁵ Out of a desire to improve reliability, reforms emphasize closely ordered accountability and oversight.⁹⁶ However, police reform scholars and researchers note common themes in police organizations' failure to improve or meaningfully capture the whole of police

⁹³ Walker and Archbold, *The New World of Police Accountability*, 48, 272.

⁹⁴ Walker and Archbold, 21–25.

⁹⁵ Shrivastava, Sonpar, and Pazzaglia, “Normal Accident Theory,” 1363.

⁹⁶ Walsh, “A Practitioner’s Guide to Trust and Legitimacy,” 31.

performance. First, reforms are difficult to sustain. They offer only a temporary change.⁹⁷ Second, police systems do not possess an institutional structure to capture or sustain the desired or needed system's behavioral changes.⁹⁸ Last, police organizations struggle to measure performance.⁹⁹ Police reforms seek to change the system's behavior by adding reliability features without addressing the system's structure or fully acknowledging its characteristics.

As systems, police organizations are generally loosely coupled management structures. Loose coupling is the idea that supervision of the system, its oversight, is more distant, whether philosophically or physically, from the system's action.¹⁰⁰ Police officers in the execution of their duties have a great deal of freedom.¹⁰¹ Because of the characteristics of policing and the geographical and resource-related constraints of management, police officers are, in effect, autonomous agents with incredible practical authority, such as the powers to use force and arrest people. Therefore, executive mandates are difficult to enforce, and agent activities are challenging to monitor in this system.

Furthermore, the dichotomy between executive value-making and the in-practice challenges and dangers of actual policing makes many reformed policing principles challenging to reconcile for practitioners, as management and practitioner priorities are often misaligned. Practical supervision and risk management are a struggle. Regardless of efforts to develop better management, accountability, and oversight, the volatility and ambiguity of the policing environment make it one of the most dangerous and costly professions globally, particularly in social and human capital.¹⁰²

The death of George Floyd is an excellent example of this concept. Before his death, Minnesota had robust laws surrounding police use of force and training. Indeed, the

⁹⁷ Walker and Archbold, *The New World of Police Accountability*, 5, 182–83; Worden and McLean, *Mirage of Police Reform*, 206.

⁹⁸ Worden and McLean, *Mirage of Police Reform*, 5, 182–83.

⁹⁹ Brown, *Working the Street*, 303; Worden and McLean, *Mirage of Police Reform*, 150–56.

¹⁰⁰ Shrivastava, Sonpar, and Pazzaglia, “Normal Accident Theory.”

¹⁰¹ Worden and McLean, *Mirage of Police Reform*, 31–32.

¹⁰² Worden and McLean, 40–41, 182–84.

Minneapolis Police Department has boasted progressive use-of-force policy, de-escalation tactics, and training, and its leadership has been committed to the principles of modern reformed policing, transparency, oversight, and accountability.¹⁰³ Yet, without supervision in the field, individual agents took actions that ended a human life and touched off global protests and riots.¹⁰⁴

Police systems are not easy to change, and they are challenging to manage. Because they are inherently loosely coupled (or distantly supervised), the police system structure does not lend itself to high reliability. Reforms seek to improve that reliability by moving supervision closer to the action in the system. Practically, however, improving reliability, such as introducing oversight, accountability, and transparency to policing, has had little proven success. One reason for this may be that many reforms have an intrinsic conflict with police departments' structure. Distance exists between managers driving policy and reform and practitioners who struggle with actual police work's volatility and danger. Practitioners give little credibility to management mandates.¹⁰⁵ Another reason, as discussed in Chapter II, may be that many police reforms are political or contrived, based on emotion or public sentiment about specific incidents. They focus on short-term behavioral fixes rather than long-term system performance.¹⁰⁶

¹⁰³ Chapter IV offers deeper analysis of the Floyd incident. Matt Vasilogambros, "Training Police to Step In and Prevent Another George Floyd," Pew Charitable Trusts, June 5, 2020, <https://pew.org/3dzYiQl>; Evan Hill et al., "How George Floyd Was Killed in Police Custody," *New York Times*, May 31, 2020, <https://www.nytimes.com/2020/05/31/us/george-floyd-investigation.html>; Minnesota Board of Peace Officer Standards and Training, *Law Enforcement Administrator's Manual for Peace Officer Hiring and Licensing* (Saint Paul: Minnesota Board of Peace Officer Standards and Training, 2016); Minneapolis Police Department, *Use of Force*, Policy 5-300 (Minneapolis: Minneapolis Police Department, 2016), http://www2.minneapolismn.gov/police/policy/mpdpolicy_5-300_5-300; Frank Straub et al., *Maintaining First Amendment Rights and Public Safety in North Minneapolis: An After-Action Assessment of the Police Response to Protests, Demonstrations, and Occupation of the Minneapolis Police Department's Fourth Precinct* (Washington, DC: Community Oriented Policing Services, 2017), 108.

¹⁰⁴ Damien Cave, Livia Albeck-Ripka, and Iliana Magra, "Huge Crowds around the Globe March in Solidarity against Police Brutality," *New York Times*, June 6, 2020, <https://www.nytimes.com/2020/06/06/world/george-floyd-global-protests.html>.

¹⁰⁵ Worden and McLean, *Mirage of Police Reform*, 150–56.

¹⁰⁶ Walker and Archbold, *The New World of Police Accountability*, 20–21.

B. A SYSTEMS APPROACH

A system's structure dictates how the system behaves. In human systems, system structure involves people's interactions, the rules that dictate behavior, and decision-making. According to Senge, system behavior is a product of system structure and vice versa.¹⁰⁷ Donella Meadows calls system behavior a latent property of system structure—a “central insight of systems theory.”¹⁰⁸ A system's behavior, good or bad, begins to tell a story about the system and how it works. Meadows argues that understanding a system's behavior is the first step in understanding how to change it. It is not enough to understand that poor system behavior occurred; recognizing why the structure allowed or caused that behavior is crucial. Thus, when a system misbehaves, the first place to start searching for a culprit is the system's structure.¹⁰⁹ Instead of reforming behavior, it may be better to reform the system.

1. System Constraints

The theory of constraints describes how a system's structure limits desirable or promotes undesirable behavior.¹¹⁰ Eliyahu Goldratt, an Israeli physicist, has described the theory's central principle: that constraints limit system performance, but effective systems manage and limit their constraints. He argues that the weakest link constrains a system, like a chain. He argues that in every chain, there may be many weak links, but only one is the weakest. In that weakest link lies the system's most likely point of failure. There are as many independent constraints in a system as there are “chains”—system interactions or outputs. Goldratt argues a system's success or failure in achieving its designed goal hinges on identifying the weak link.¹¹¹ In police systems, one could argue that the pursuit of high reliability without first addressing a loosely coupled police system structure with poor

¹⁰⁷ Senge, *The Fifth Discipline*, 40–47.

¹⁰⁸ Meadows, *Thinking in Systems*, 1.

¹⁰⁹ Meadows, 1–2.

¹¹⁰ Thomas Pyzdek and Paul A. Keller, *The Handbook for Quality Management: A Complete Guide to Operational Excellence*, 2nd ed. (New York: McGraw Hill, 2013), 75–76.

¹¹¹ Eliyahu M. Goldratt, *The Haystack Syndrome: Sifting Information Out of the Data Ocean* (Great Barrington, MA: North River Press, 2006), 50–54.

performance management is a weak systemic link. The incompatible approach to the necessary characteristics creates a counterproductive system environment. For instance, in Oakland, California, reformed policing practices designed specifically to improve reliability and accountability for use of force and transparency of process severely inhibited the organization's ability to function at even basic levels.¹¹²

Constraint management serves as a simple exemplar for starting to evaluate systems for problems. It is a way of exploring systems for flaws and opportunities to improve them. Goldratt's theory is foundational to learning in and about systems because no matter how well a system performs, it always has a weakest link. It must be functionally cyclical, continuously inspecting weak links for opportunities to improve the system or remove a constraint. The cyclical process in systems is an important theme. It is a key characteristic in understanding the difficulty of managing living systems, due mostly to their complexity. It is also key to creating a structure for influencing system behavior in living systems.

2. Living Systems

The connectivity of human interaction makes living systems far more complex than mechanical ones, such as computers.¹¹³ Moreover, systems that serve the public, such as police departments, are living systems that serve many other living systems. Racial groups, organizations, social groups, neighborhoods, and tribes represent some of the different living social systems police organizations interact with on many different levels. Living systems are unpredictable—they change quickly, often without warning—so managing them is, at best, a difficult proposition.

Those who manage or desire to alter living systems, working within other complex living systems, must understand that because there is no end state or final systemic result, the system is constantly evolving. Thus, there is no adequate way to establish fixed protocols to serve the system or systems it interacts with for any period. It also means that

¹¹² David Debolt, "Oakland Police Suspend Policy That Caused Calls to Stack Up," *Mercury News*, February 28, 2020, <https://www.mercurynews.com/2020/02/28/after-hundreds-of-911-calls-stacked-up-oakland-police-end-new-use-of-force-reporting-program/>.

¹¹³ Senge, *The Fifth Discipline*, 267.

to best relate to other systems, it needs mechanisms to measure its performance and the systems with which it interacts in perpetuity. It must have a reflexive or adaptive component. In human systems, the humans within them are the adaptive component of the system.¹¹⁴

Much like the human body, the ability to adapt effectively relies on knowing how to adapt. Within the human body are an infinite number of neurological, nervous, and cogent sensors that feed information to the living system. Those sensors trigger systemic responses, both observed and unobserved by the host, not only to survive but also to thrive. Systems that do not adapt are subject to entropic, or disordered, effects. Systems exhibit design in how they work together in non-linear, responsive, and reflexive ways, depending on the varied internal or external environments they face. For example, a human evolves naturally. Similarly, for police systems, there is no guaranteed natural evolutionary end. Successful evolution, especially routine evolution, depends on intelligent design.¹¹⁵ Police organizations, too, must evolve intelligently, with information at the root of that growth or change. Otherwise, disorder or entropy takes hold.

The nature of living systems represents opportunities rather than constraints in several ways. First, living systems, like living organisms, can self-order when managed properly because, as in human bodies and living eco-systems, control is distributed throughout the system.¹¹⁶ Second, there is an opportunity in the evolutionary properties of living systems to develop and function without being wholly formed. Like iterative business design, such systems transform while working and learning perpetually.¹¹⁷ Last, and perhaps most important, because living systems are the sum of their distributed living parts, “sensing and acting locally is exactly how complex living systems work.”¹¹⁸ Senge

¹¹⁴ Senge, 42.

¹¹⁵ José A. Olalde Rangel, “The Systemic Theory of Living Systems and Relevance to CAM: The Theory (Part II),” *Evidence-Based Complementary and Alternative Medicine* 2, no. 2 (June 2005): 129–37, <https://doi.org/10.1093/ecam/neh093>. This article does not speak to a theological position. Rather, it considers intelligence as acting upon information at the cellular level.

¹¹⁶ Senge, *The Fifth Discipline*, 269.

¹¹⁷ Senge, 322.

¹¹⁸ Senge, 365.

argues that the ability to function autonomously for the good of the system is based on “connecting metrics and target setting with in-depth process knowledge at the front lines.”¹¹⁹

The strong hierarchal ties of leadership and oversight in traditional police organizations can be disbursed throughout the system so long as the system—in this case, the humans that form it—understands its purpose. It can act without a conscious design to do so. This is called flattening the hierarchy. A flat hierarchy is ideal for adaptive, fast responsiveness.¹²⁰ Managed properly, the system, like all living systems, could be a virtually autonomous cyclical system holistically optimized to survive and adapt simultaneously.

In 2015, the Seattle Police Department redeployed its organization with what it called a micro-community policing plan. Seattle’s police had recognized that “no two neighborhoods in Seattle [were] the same. Micro-community policing plans recognize and address this. These plans are developed by bringing community engagement and crime data together and directing police services to address the individual needs of each community.”¹²¹ Partnering with Seattle University to measure feedback via a survey of residents, the Seattle Police Department created a series of microsystems that acted and sensed locally based on community needs, thereby flattening the organizational hierarchy. Micro-community policing plans have, by and large, demonstrated positive results, as Seattle University survey results from 2015–2019 indicate higher trust in police performance than found in national surveys.¹²²

3. System Optimization

System optimization prioritizes the system rather than the system’s components in developing a management structure that achieves the system’s design. W. Edwards

¹¹⁹ Senge, 364.

¹²⁰ Pyzdek and Keller, *The Handbook for Quality Management*, 59.

¹²¹ “Micro-Community Policing Plans,” Seattle Police Department, accessed August 7, 2020, <http://www.seattle.gov/police/information-and-data/mcpp-about>.

¹²² Seattle Police Department, “Micro-Community Policing Plans.” Chapter V of this thesis discusses Seattle and its police department at length, including references to micro-community policing plans.

Deming, the father of total quality management and a systems pioneer, wrote that it is the purpose of every agent, process, and component to “contribute its best to the system, not to maximize its production, profit, or sales, nor any other competitive measure.”¹²³ System optimization is like a series of dials that help tune the system to its ideal state.

Regardless of the structure of a system, optimization sets priorities for the system’s goals. Constraints are obstacles to those goals. Aside from setting goals and the priorities to achieve them, much of the success of systems management in a living system is about identifying constraints and managing them. In practice, optimization is a cyclical process of evaluating and analyzing system properties to identify improvement areas. More important, it involves connecting that analysis to the system agents with the knowledge to correct them.¹²⁴

Early intervention systems deployed inside police departments are a kind of system optimization. Such systems capture potentially risky practitioner behaviors or micro-behaviors and aggregate them into risk categories. The purpose of these systems is to identify officers who might present behaviors that cause organizational problems in the present or future and provide managers with information about those behaviors to drive decision-making about those officers. Many of the behaviors captured in an early intervention system are not representative of misconduct or criminal action, nor are they necessarily precursors of either. They are behaviors or characteristics typically identified in officers whereby small problems have manifested into larger issues over time. Most early intervention focuses on training, skill-building, supervision, and performance monitoring as techniques to mitigate those risky behaviors. Early warning systems capture system faults (constraints) before they become catastrophic system failures.¹²⁵

¹²³ W. Edwards Deming and Kevin Edwards Cahill, *The New Economics for Industry, Government, Education*, 3rd ed. (Boston: MIT Press, 2000), 53, 100.

¹²⁴ Pyzdek and Keller, *The Handbook for Quality Management*, 76–77.

¹²⁵ Jennifer Helsby et al., “Early Intervention Systems: Predicting Adverse Interactions between Police and the Public,” *Criminal Justice Policy Review* 29, no. 2 (2018): 190–209, <https://doi.org/10.1177/0887403417695380>; Ted Carmichael and Mirsad Hadzikadic, “The Fundamentals of Complex Adaptive Systems,” in *Complex Adaptive Systems*, ed. Ted Carmichael, Andrew J. Collins, and Mirsad Hadžikadić (Cham: Springer, 2019), 1–16, https://doi.org/10.1007/978-3-030-20309-2_1; Walker and Archbold, *The New World of Police Accountability*, 137–42.

C. THE THEORY OF PROFOUND KNOWLEDGE

Like Senge, Deming argues that managing systems begins with acknowledging their existence and their characteristics and developing the capacity to manage them. Deming based his work on the ‘theory of profound knowledge,’ which explains both the evaluative and practitioner capacities necessary for optimally performing systems.

First, the theory of profound knowledge states that managing systems begins with accepting and appreciating that systems exist. Most, if not all, organizational structures are systems, complete with system characteristics and behaviors. Structure and behavior remain perpetually linked in systems. In the same way, system growth or improved performance is not accidental. System growth can be an intentional act. In Deming’s usage, system growth involves expanding systemic structures and system agents, as well as the infrastructure’s performance capacities.¹²⁶

Second, managing systems is in part about accepting system variances and understanding how they occur. System variance is another way of thinking about complexity in many ways. Because systems change, the ability to manage them lies in leveraging changing behaviors to mitigate the unwanted while exploiting the beneficial and knowing the difference between them. By embracing that variance—the wide range of potential outcomes—the system and its managers can make sense of outcomes—expected and unexpected—and learn from them. The key to power in complexity is learning.¹²⁷

Third, there is a foundational belief about how a system should perform in any system. This means that system managers and executives have expectations of a system’s performance. For example, a football coach generally has a game plan and expectations of a game’s outcome or, at the very least, his or her team’s performance in the game. Deming calls this the “theory of knowledge,” not to be confused with the overarching theory of profound knowledge of which the former is but one part. System managers make predictions about systems based on their understanding of them, but they cannot be certain about those predictions without future evidence. Deming argues that all knowledge is

¹²⁶ Pyzdek and Keller, *The Handbook for Quality Management*, 35.

¹²⁷ Pyzdek and Keller, 35.

theoretical until tested. This theory-testing process is perpetual, so all knowledge is essentially a feedback response to tested theory, and all untested knowledge is theoretical. In this way, knowledge is rooted in evidence of performance. All other beliefs are theoretical until proven.¹²⁸

Finally, the theory of profound knowledge involves psychology. Deming believed that good management acknowledges the variances in living systems, including the human agents and agents of other systems. The predictability of behavior is directly related to how people think, process, and behave. Systems involving people are incredibly volatile, and attempting to understand how they might behave is central to developing a strategy for system design and improvement. Also crucial in Deming's work is the idea that joy is foundational to human and human-system performance. He understood the power of contentment and purpose, and much of his management theory focuses on the practitioner's empowerment, self-improvement, and education. Drawing a correlation between practitioner performance and systemic performance, Deming observed that system performance is directly linked to the nature of human beings and how they think.¹²⁹ Their health, particularly their mental states, in part drives system performance. It appears Deming understood the complexity of living systems.

1. Total Quality Management

The theory of profound knowledge is the basis of Deming's work in quality management theory. Deming's system of management, total quality management, became instrumental in the evolution of management strategy.¹³⁰ More than that, many nuanced complex organizations adopted and built on Deming's work and that of Joseph Juran and others to create systems that exemplify the modern learning organization's essential

¹²⁸ Pyzdek and Keller, 35.

¹²⁹ Pyzdek and Keller, 35–36.

¹³⁰ Mohammad Talha, "Total Quality Management (TQM): An Overview," *Bottom Line* 17, no. 1 (2004): 15, <https://doi.org/10.1108/08880450410519656>.

components.¹³¹ It is no surprise, then, that many of the same concepts found in the core of quality management theory also exist in systems theory and learning organization theory.

Deming introduced total quality management (TQM) as a quality-focused management strategy that aligns performance and output with organizational vision and goals and works both to assure quality in processes and output while building agent capacity.¹³² Toyota famously adopted the TQM philosophy and built its processes to educate employees on its principles, empowering them to analyze and improve their own system spaces. Deming's theories in application largely institutionalize systems management to eliminate constraints and produce the designed output while also standardizing holistic improvements at every level.¹³³

Pyzdek and Keller argue that TQM as a practice is hard to define because Deming and the quality industry never codified its applications.¹³⁴ Seen as a philosophical framework by many and a business practice by others, some of the ideas rooted in the theory of profound knowledge and exemplified by TQM as a framework could have value in aligning goals with output. Regardless of how it is viewed, TQM has some distinct characteristics.

First, TQM makes organizational output the exclusive responsibility of the organization's upper management. Second, it is firmly rooted in the concepts of the theory of profound knowledge. Its components are designed to monitor and manage the system's intrinsic responsibilities while also seeking continuous system improvement from both the system and agents. As a result, there are three focus areas in TQM: quality assurance, quality control, and quality improvement.¹³⁵

¹³¹ Senge, *The Fifth Discipline*, 312.

¹³² Talha, "Total Quality Management," 15–19.

¹³³ Senge, *The Fifth Discipline*, 312–13.

¹³⁴ Pyzdek and Keller, *The Handbook for Quality Management*, 51.

¹³⁵ Talha, "Total Quality Management," 17.

a. Quality Control

Quality control effectively manages the system in ideation, design, training, supply, and production. Quality control oversees the series of processes, or systems, that create the organizational output. It is concerned with the finished product and whether that product achieves the organizational goals set for production. This phase deals in standardizing and stabilizing efficient internal processes to ensure the external perception of quality.¹³⁶ Quality control can measure all of the processes, training, expertise, and production efforts that go into creating an expected output.¹³⁷

A fictional example may demonstrate how quality control, quality assurance, and quality improvement make up the trinity of quality management, first in a business setting and second in a police setting. Imagine a company sets out to create and sell widgets. As the company ideates, designs, and creates its prototype widgets, executive management identifies a winner and sets a system goal. The quality control mechanism then sets out to ensure everything from the supply chain to the machinery to the personnel is attuned to create the best possible representation of that product. The mechanism does this by inspecting the products, typically through statistical sampling, and as it provides feedback on potential faults and failures, it—theoretically—addresses them to ensure standardized output.

Quality control mechanisms exist already in many police organizations. Audits and inspections of adherence to policy and procedure, along with early intervention systems, represent a form of quality control. Agencies, such as the Phoenix Police Department, that monitor internal performance to ensure standardized performance are exercising, at least in spirit, a quality control method.¹³⁸

¹³⁶ Pyzdek and Keller, *The Handbook for Quality Management*, 20.

¹³⁷ Robert C. Davis, *Selected International Best Practices in Police Performance Measurement*, Technical Report 1153-MOI (Santa Monica, CA: RAND Corporation, 2012), 3.

¹³⁸ Jeri L. Williams, “Professional Standards Bureau (PSB) Overview” (presentation, Phoenix Police Department, Phoenix, AZ, October 31, 2019), https://www.phoenix.gov/policesite/Documents/PSB_Overview.pdf.

b. Quality Assurance

The assurance of quality in the system's production or output is a measurement to determine through various processes whether the system does what it is supposed to do. In the private-sector context, quality assurance guarantees the customer is getting the product as advertised. Quality assurance focuses on how the system's output is delivered and received, along with the satisfaction and expectations of the output's target.¹³⁹ Quality assurance measures outcomes of performance rather than the outputs.¹⁴⁰

Continuing the fictional widget manufacturing example, independent of quality control but perpetually interconnected, quality assurance mechanisms study the finished product and how consumers receive it. They study whether the expectation of the consumer matches that understood by the manufacturer. Simply stated, they seek to answer whether the product is what the consumer expects and then provide that feedback to the organization's decision-makers to adjust processes or system goals. Whether this occurs at the executive or practitioner level is mostly a matter of goals and organizational hierarchy.

In a policing context, much of the Commission on Accreditation for Law Enforcement Agencies (CALEA) platform is rooted in the idea that adhering to the "gold standard" guarantees a level of performance that assures performance quality. In their 2017 study, Hougland and Wolf maintain, "Agencies that become accredited can benefit from improved written policies and directives, improved relationships with the communities they serve, and reduced liability and risk for the agency."¹⁴¹ Their study found that accreditation does not ultimately reduce citizen complaints or have a meaningful impact as a quality assurance strategy.¹⁴² Nonetheless, CALEA and organizations like it represent merely a foothold, as externally attuned performance metrics that promote quality assurance already exist within law enforcement systems.

¹³⁹ Talha, "Total Quality Management," 17.

¹⁴⁰ Davis, *Best Practices in Police Performance Measurement*, 3.

¹⁴¹ Steven Hougland and Ross Wolf, "Accreditation in Police Agencies: Does External Quality Assurance Reduce Citizen Complaints?," *Police Journal: Theory, Practice and Principles* 90, no. 1 (2017): 41, <https://doi.org/10.1177/0032258X16671030>.

¹⁴² Hougland and Wolf, 51.

c. *Quality Improvement*

Quality improvement is the systemic practice of improving capacity to provide a product that meets the organizational goals as designed. It constantly evaluates processes, design, system relationships, agent learning, and evolution to achieve better performance. Through this process of quality improvement, organizational growth through learning and agent evolution, agent development, and organizational capacity occurs. Quality improvement is perpetual, an ideal construction for living systems constantly in flux, and it is granular, meaning no role or process is outside the scope of improvement. It is neither agent based nor system based; it is a philosophical filter of goals, values, and optimization through which the system, its sub-systems, and all of its agents, along with organizational outputs, pass.¹⁴³

In the widget factory, quality improvement seeks to improve everything from production cost and time to delivery to profit margins and employee satisfaction. Quality improvement seeks to identify the system's leverage points to change the system, increase its capacity, and meet its managers' goals. In the widget factory, quality improvement seeks to identify ways, probably over time, to create the best, cost-effective, and most desirable widget possible. It is important to note that this process is iterative. Quality improvement is the responsibility of every agent in this system, and improvement can come from anywhere.

In many ways, police reforms serve as quality improvement mechanisms in modern policing. Walker argues that consent decrees force agencies to evaluate themselves, train their officers, and adopt new, better ways of doing things.¹⁴⁴ Hougland and Wolf express much the same thing in that reform movements of the 1970s–1990s sought to promote better police performance.¹⁴⁵ Moreover, the mission of Obama's Task Force on 21st Century Policing was to examine policing and recommend practices that promote better

¹⁴³ Pyzdek and Keller, *The Handbook for Quality Management*, 20; Talha, "Total Quality Management," 17–18.

¹⁴⁴ Walker and Archbold, *The New World of Police Accountability*, 270–71.

¹⁴⁵ Hougland and Wolf, "Accreditation in Police Agencies," 40–42.

ways to relate to communities and foster productive-yet-equitable policing practices to improve it.¹⁴⁶ These structures are challenging because, by and large, they are slow-moving, have recurring problems, and go unmeasured for effectiveness.¹⁴⁷ They lack the agility of quality improvement in the TQM framework.

2. Quality Management as a Systems Framework

As much a system management philosophy as it is an industrial application of quality management, TQM may conceptualize a systems framework to achieve what traditional police reforms do not. Police organizations can improve their output and remain focused on internal and external feedback while monitoring performance with an eye to perpetual improvement that matches the evolution of environments, expectations, and desires of those they serve. They can become functional learning organizations and achieve an awareness of their system space and systems around them in ways not previously realized. More important, they can perform better and adapt to new problems and environmental changes proactively as they become optimized within their systems.

TQM captures the nature of living systems and the complexity in them created by people. It also captures the ability of the system to learn about itself. At the same time, it operates and leaves room to adjust the system space depending on the feedback it receives and captures opportunities to educate, empower, and optimize systemic components (agents) as whole systems or as individual agents. This dynamic optimizes the system to learn and adjust its self-awareness based on that learning. This structure can optimize system performance while eliminating constraints and allowing for systemic growth in idealized behaviors derived from the system's feedback.

TQM's power is its ability to measure every aspect of a system's performance, including its related systems and those the system interacts with, better understanding its

¹⁴⁶ President's Task Force on 21st Century Policing, *Final Report of the President's Task Force on 21st Century Policing* (Washington, DC: Community Oriented Policing Services, 2015), 1–4, 69–70.

¹⁴⁷ Department of Justice, Office of the Inspector General, *Audit of the Department of Justice's Efforts to Address Patterns or Practices of Police Misconduct and Provide Technical Assistance on Accountability Reform to Police Departments* (Washington, DC: Department of Justice, 2018), <https://www.oversight.gov/sites/default/files/oig-reports/a1814.pdf>.

internal or external performance. It is a holistic goal and a performance-based adaptive system framework capable of receiving feedback from anywhere that promotes continuous improvement in all areas.

Effectively, TQM is the practical application of the theory of profound knowledge. It is a series of mechanisms that attempt to understand, internally and externally, a problem and system space while being goal- and adaptation-focused. Thus, combined, quality control, quality assurance, and quality improvement are a system for performance management. Whether used in a widget factory, a global automobile conglomerate, or a police department, these overlapping mechanisms monitor and evaluate systemic performance from both the inside and the outside, including feedback from other systems challenging the managed system constraints and seeking improvement opportunities.

In some ways, the idea of TQM as a management philosophy has fallen out of favor.¹⁴⁸ Many organizations that tried to implement it found the results mixed. However, one survey of organizations that implemented TQM processes focused on evaluation and improvement, yet all surveyed companies achieved some positive results.¹⁴⁹ Pyzdek and Keller found that TQM as a practice requires significant commitment from executive leadership to be successful. TQM is an organization-wide, top-down, process-focused approach to management. It requires time to build a cultural commitment as well as executive and management support. Well-defined hierarchies struggle to implement TQM.¹⁵⁰ Pyzdek and Keller also note that some TQM advocates have found long-term commitment to the underlying philosophy by installing a total quality leader (TQL) to work alongside chief executives to “function as an extension of the CEO as a change agent.”¹⁵¹ The TQL functions as both a stabilizing force and focusing agent for the organization, continually steering executive leaders to look at the organization’s processes and priorities through the lens of the TQM philosophy.

¹⁴⁸ Talha, “Total Quality Management.”

¹⁴⁹ Pyzdek and Keller, *The Handbook for Quality Management*, 50.

¹⁵⁰ Pyzdek and Keller, 50–51.

¹⁵¹ Pyzdek and Keller, 52.

The scope of this thesis is crucial in evaluating TQM as a business practice. First, profitability and commercial success are less important than the systems management philosophy found underlying the execution of TQM. For law enforcement organizations, committing to the philosophical implications of the theory of profound knowledge and managing systems as systems are more crucial in effectiveness than fixating on corporate successes or failures. Building management philosophies by perpetually monitoring, measuring, evaluating, and evolving system performance with every metric possible to adapt and improve them might have tremendous benefit for law enforcement organizations. There are some examples to consider in this evaluation.

a. TQM Applications in Law Enforcement

In the late 1990s, Canada, led by the Royal Canadian Mounted Police, began installing quality assurance units in its police services. According to a 2013 survey by the Canadian Association of Chiefs of Police's Quality Assurance in Law Enforcement Committee, 23 respondents had quality assurance (QA) units or the equivalent in their organizations. A Ryerson University study behind the survey found that Canadian police services developed QA programs to improve financial transparency, internal and external processes, risk mitigation, policies and practices, and other reform-like measures.¹⁵² Recognizing the need to re-think internal and external command structure and organizational processes drove Canada's QA policing movement.¹⁵³

There are many different scaled iterations of the quality assurance model in Canadian police services. The Royal Canadian Mounted Police, Canada's largest police agency, remains a leader in the QA field. In Ontario, Alberta, Quebec, and Nova Scotia, some QA functions are mandatory based on statutory regulations. In Ontario, this includes

¹⁵² Wendy Cukier, Terry M. Cheslock, and Sara Rodrigues, *Quality Assurance, Risk Management and Audit in Canadian Police Services: Current Status and Emerging Trends* (Toronto: Ryerson University, 2013).

¹⁵³ Cukier, Cheslock, and Rodrigues.

specific processes detailing regulatory compliance, professional standard upkeep, tracking, and training to ensure “adequate and effective police services.”¹⁵⁴

The research suggests that Canadian police services have implemented a fully integrated TQM approach to sustain and improve their policing. Despite the moniker of quality assurance for their units, the Canadian model largely represents all three elements of the systemic measurement, adjustment, and improvement-focused management structures of the TQM framework. The application of TQM is linked in some way to most organizational outputs in a capacity designed to measure, survey, and watch over to ensure that external products match both management and consumers’ expectations. As such, Canadian QA units, teams, and organizational values directly connect with leadership’s view of priorities. The Canadian TQM process focuses on many administrative areas, including improving service delivery, informing on and positively impacting community safety, improving officer safety, reducing risk, improving processes and policies, overseeing regulatory compliance, and ensuring transparency and oversight functions (auditing/inspecting).¹⁵⁵

Much of the literature about the establishment and use of TQM practices in Canada focuses on internal measurements of success, meaning executive and practitioner confidence that programs have value.¹⁵⁶ To date, there has been no research correlated directly to the implementation of TQM in Canada to satisfaction with policing there. Nevertheless, data from Statistics Canada suggests some effectiveness with the approach, as over 60 percent of respondents in Canada reported that police were “doing a good job” between 2004 and 2014—roughly the decade following the study on TQM in police

¹⁵⁴ Wendy Cukier et al., “Quality Assurance in Canadian Police Services,” *TQM Journal* 24, no. 4 (2012): 295–309, <https://doi.org/10.1108/17542731211247337>.

¹⁵⁵ Cukier et al.

¹⁵⁶ Cukier et al., “Quality Assurance,” 50.

services.¹⁵⁷ Over the same period, Americans' confidence in police wavered between 64 percent in 2004 and 53 percent in 2014.¹⁵⁸

There is nothing in the literature that suggests Canadian police services have built the TQM-style programs for any supposed systemic benefits. Regardless of their designers' intent, however, these programs resemble TQM processes to improve performance in accountability, oversight, and transparency for the benefit of legal reforms. Any systemic benefits that followed the application of this model may have been unintentional. Nevertheless, the structure, to a degree, seems to function effectively. It appears that regardless of a systems-thinking approach, there may be a benefit to using a QA methodology exclusively as a management platform for legal reforms. In this frame, it might exist much in the same way that Samuel Walker extols the virtues of the consent decree's monitor-like watchdog structure of police performance metrics.¹⁵⁹

In the United States, oversight, accountability, and transparency are of more importance than ever.¹⁶⁰ Nevertheless, finding U.S. police units or organizational structures as robust or as focused on delivering services and internal and external accountability as those in Canada is difficult. The Tampa Police Department tested a QA program in 2014, but by 2015, it was effectively inoperable.¹⁶¹ The unit was designed for a civilian regulator of sorts to conduct "mini-audits" within the organization after a spate of misconduct incidents.¹⁶²

¹⁵⁷ Adam Cotter, "Spotlight on Canadians: Results from the General Social Survey, Public Confidence in Canadian Institutions," Statistics Canada, December 7, 2015, <https://www150.statcan.gc.ca/n1/pub/89-652-x/89-652-x2015007-eng.htm>.

¹⁵⁸ "Confidence in Institutions," Gallup, accessed February 12, 2021, <https://news.gallup.com/poll/1597/Confidence-Institutions.aspx>. The comparison is for context rather than a suggestion of some correlation between the statistics and the implementation of TQM in Canada or lack thereof in the United States.

¹⁵⁹ Walker and Archbold, *The New World of Police Accountability*, 178–205.

¹⁶⁰ Walker and Archbold.

¹⁶¹ Siobhan Scott and Joyce Iwashita, "Lessons from Tampa Police Department's Quality Assurance Program," National Training and Technical Assistance Center, November 4, 2016, <https://bjatta.bja.ojp.gov/media/blog/lessons-tampa-police-department%E2%80%99s-quality-assurance-program>.

¹⁶² Dan Sullivan, "Tampa Police Department's Quality Assurance Job Empty," *Tampa Bay Times*, February 21, 2015, <https://www.tampabay.com/news/publicsafety/after-police-firings-tampa-chief-jane-castor-creates-quality-assurance-job/2218654/>.

The New York City Police Department (NYPD)'s Quality Assurance Division has a broad scope of oversight duties. From tracking the use of toll passes and facility inspections to auditing complaint data, this mechanism assures the NYPD's crime statistics are accurate. The unit's goal is to root out misconduct or abuse of authority.¹⁶³ Its name is a misnomer because it functions like an organizationally focused internal-misconduct mechanism rather than an improvement-focused, performance-tracking device. It does not focus on the overall institutional review of outcomes or processes for monitoring quality. Additionally, although there have been projects in New York to measure outcomes and capture sentiment from an assurance framework, the mechanism goes mostly unused.¹⁶⁴

The Phoenix Police Department has a broad-scoped internal audits and inspections unit within its Professional Standards Bureau. The unit measures adherence to policies and procedures to identify individual failures of performance, policy violations, and acts of negligence or misconduct.¹⁶⁵ The Professional Standards Bureau's programs focus on internal oversight and review. The department's application, as described, appears to mirror the monitoring aspects of the federal enforcement of police reform. Its unit functions as a perpetual, self-imposed, internal monitor in many ways. While the unit is an established organizational feature to ensure standardized performance and adherence to policies and procedures by officers and managers, it has no outward-facing mechanisms that inform the system as a whole. Despite the absence of outward-facing feedback measurement mechanisms, Phoenix's internal controls are noteworthy as some of the most robust discovered in this research. Like Canada's, Phoenix's structures have TQM-like features, but they have no demonstrated systems-thinking approach built into them. More than anything, the Phoenix approach presents a robust set of quality control mechanisms, while little else resembles the model. Indeed, few if any applications of the theory of profound knowledge appears in the program or the philosophy around its structure.

¹⁶³ New York City Police Department, Quality Assurance Division, *QAD Newsletter*, no. 1, May 2017.

¹⁶⁴ Susan Edelman, "NYPD Wasting Millions on a 'Sentiment Meter' Survey They Don't Even Use," *New York Post*, December 14, 2019, <https://nypost.com/2019/12/14/nypd-wasting-millions-on-a-sentiment-meter-survey-they-dont-even-use/>.

¹⁶⁵ Williams, "Professional Standards Bureau (PSB) Overview."

This research did not appraise the nearly 18,000 American police departments for the nature and make-up of their oversight and accountability mechanisms. Such an inquiry is beyond the scope of this thesis. Undoubtedly, reform-minded programs throughout the United States represent excellent applications of rethinking reform. Nevertheless, when this research attempted to identify TQM structures or their equivalent in the United States, it uncovered very few. Whether aborted or tightly focused programs or compartmentalized-but-robust internal controls, there certainly appears to be no widespread application in the United States akin to the Canadian example of QA. At least one police unit in the United States has committed to a philosophical systems approach similar to the Canadian model—the name is similar, too.

Rebranded in October 2019, the Bakersfield Police Department (BPD)’s Quality Assurance Unit (QAU) used to look like Phoenix’s internal oversight application. It shared that name as well: the Professional Standards Unit.¹⁶⁶ The BPD serves the ninth-largest city in California and 61st largest city in the United States.¹⁶⁷ Embattled by a reputation as an aggressive police department, Bakersfield was labeled the “deadliest police in America” by a *Guardian* investigative report.¹⁶⁸ The BPD faced two pattern-and-practice investigations, from both state and federal DOJ investigative teams, starting in 2003. As a result, it entered a self-reflection period and created the QAU as part of its response. The research found that the QAU represents a TQM approach rooted in a systems-driven philosophy and found in the theory of profound knowledge: monitoring, measuring,

¹⁶⁶ “The Bakersfield Police Department Monitors the Use of Excessive Force through Special Division,” ABC News Bakersfield, June 12, 2020, <https://www.turnto23.com/news/crime/the-bakersfield-police-department-monitors-use-of-force-through-special-division>.

¹⁶⁷ “Latest News,” City of Bakersfield, accessed November 22, 2020, <https://bakersfieldcity.us/news/displaynews.htm?NewsID=795&TargetID=1,2,3,7,8,6,11,12,13,14,5,15,16,4,17,18,19>; “Bakersfield Ranks 61st Largest Metropolitan Area,” *Bakersfield Californian*, March 29, 2016, https://www.bakersfield.com/news/bakersfield-ranks-61st-largest-metropolitan-area/article_188110ea-657a-53a2-a31f-b7c1987c3d59.html.

¹⁶⁸ Jon Swaine, Oliver Laughland, and Mae Ryan, “The County: The Story of America’s Deadliest Police,” *Guardian*, December 1, 2015, <https://www.theguardian.com/us-news/2015/dec/01/the-county-kern-county-deadliest-police-killings>.

evaluating, and evolving system performance.¹⁶⁹ Additionally, it appears to function as the system's driving and focusing mechanism within the organization, much like Pyzdek and Keller described, making it unique among the researched organizations.

b. The Bakersfield Quality Assurance Model

The QAU's mission is "to create and monitor mechanisms for continuously evaluating the performance of the BPD in order to institutionalize continuous improvement in accomplishing its mission in serving the City of Bakersfield and its residents."¹⁷⁰ Further research reveals that the QAU serves as a collection point for internal and external feedback while addressing traditionally accepted reform best-practice applications of accountability and oversight functions like early intervention, audits, and inspections. The BPD's approach uses traditional reform platform tools and programs to help manage its inward- and outward-facing systems. This means that the organization has found ways to leverage the components of existing accountability and oversight tools through the filter of systems thinking to provide information to managers about the systems themselves. More than a shift in practices or processes to adopt systems thinking, it is a shift in philosophy and an approach that focus on the existing systems and their opportunities for advantage.¹⁷¹

Figure 1 provides a conceptualization of how the unit fits within the input and output of the organization. This image appears in an internal BPD memo describing the unit's functions and processes.¹⁷²

¹⁶⁹ Disclosure: The author works at the BPD, manages the QAU, and helped develop and implement the program. Also, it was not designed as a system management structure but conceived as a TQM-style structure in collaboration with BPD command staff in 2018–2019 without consideration of systems thinking. The development of the unit evolved as did its mission, in part due to research for this project. The unit's role in this work is somewhat serendipitous. Likewise, this thesis is, in some ways, an outgrowth of the development of the QAU as well.

¹⁷⁰ Bakersfield Police Department, "Bakersfield Police Department Quality Assurance Unit: Mission and Scope" (internal memorandum, Bakersfield, CA: Bakersfield Police Department, 2019).

¹⁷¹ Bakersfield Police Department.

¹⁷² Bakersfield Police Department.

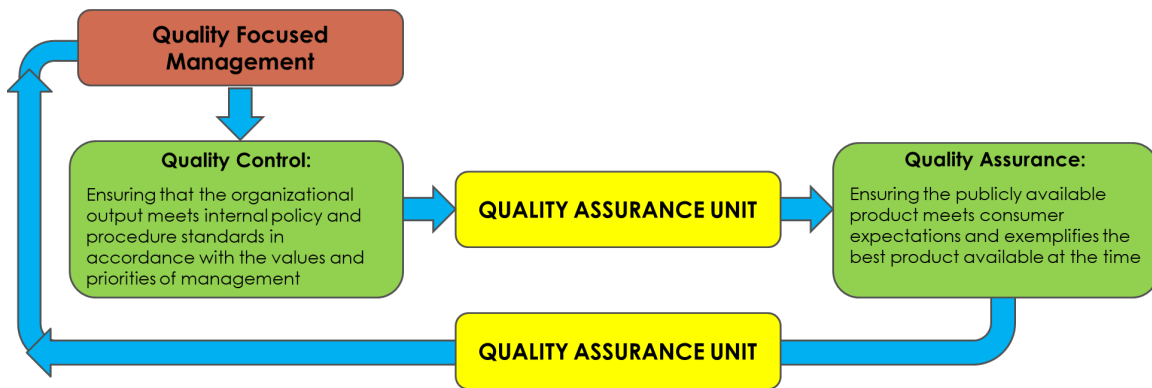


Figure 1. Quality-Focused Management¹⁷³

The BPD's QAU methodology is as much a system of improvement as it is a system of maintenance. It is a way to sustain and monitor appropriate and necessary systemic behavior and place data about the organization, its performance, and, importantly, its perceived performance in its key leaders' hands to drive adaptations and adjustments to behaviors quickly, proactively, and perpetually. One of the most beneficial aspects of Bakersfield's model is the system's ability to identify, qualify, reward, and then—theoretically—replicate ideal or positive agent and system behaviors. Unlike traditional reforms, which seek to eradicate destructive behaviors by constraining system and agent behaviors, this model seeks to reinforce positive behaviors and improve the system as it does so.

Even still, it possesses the ability to capture and mitigate risky or harmful behaviors. Because personnel are dedicated to monitoring and driving system data throughout the organization about its system and problem spaces, there is a reflective quality naturally lost in highly adaptive, volatile environments that can be stored and qualified in this unit.¹⁷⁴ As such, the ability to learn from systemic failures or high-profile, risky events, particularly at the executive level, is ever-present within the system's structure. The QAU, in this way,

¹⁷³ Source: Bakersfield Police Department.

¹⁷⁴ Bakersfield Police Department.

serves as a kind of memory and knowledge management collection point. Senge points out this essential benefit, as many organizations struggle to reflect.¹⁷⁵

For example, the QAU conducted a series of after-action reviews of its pandemic response during the COVID-19 pandemic. Captured in the assessment were its organizational response, partner agencies, supply chains, and best practices learned from around the nation. As a result, the unit created a pandemic response framework along with a manual guiding future pandemic response. The manual captures the lessons learned from the pandemic's outbreak, its short- and long-term challenges, and practices to improve readiness, response, and ongoing management of similar events into the future.¹⁷⁶ Many organizations' after-action processes are lost due to many competing priorities. A system structure designed to capture reflection in this way gives a system an edge in resiliency and adaptability. Such a structure also imparts the ability to learn and capture learning over long periods.¹⁷⁷

Like the Canadian model, the Bakersfield structure based on the TQM framework serves to optimize the system's performance while mitigating risk. By making system-based and agent-based micro-adjustments—theoretically, in near real-time—the organization faces fewer significant systemic failures and limits the impact of “normal accidents.” It captures the essence of high reliability and flattens the organizational response to it, building competency and making systemic improvements at the same time.

The QAU's use-of-force inspection program has shown such benefits as risk mitigation and positive reinforcement for agents. This program reviews use-of-force reports and subsequent supervisor investigations. Through a combined process of monthly random selection, early intervention system alerts, and incident-driven criteria, the QAU convenes a panel of use-of-force experts to review incident reports, officer and suspect interviews, body-worn camera footage, and investigative photographs. The reviews search

¹⁷⁵ Senge, *The Fifth Discipline*, 287–92.

¹⁷⁶ Robert Tyo, *Bakersfield Police Department Quality Assurance Unit: Covid-19 Pandemic Response After Action Report* (Bakersfield, CA: Bakersfield Police Department, January 2021).

¹⁷⁷ Senge, *The Fifth Discipline*, 287–92.

for and identify potential deficiencies in officers' performance, their tactics, indicators of potential misconduct, and risky micro-behaviors. As the experts identify problems, leaders also identify retraining strategies, tactical considerations, and organizational practices and implement them both at the individual and organizational levels.

Additionally, through this review process, the program captures and amplifies ideal and positive behaviors through training, praise, and reinforcement. The QAU manages other similar programs for various organizational outputs and outcomes. This series of processes or systems of review reflects in many ways the philosophy of the theory of profound knowledge in that there is a deliberate, perpetual effort to monitor, measure, evaluate, and evolve within the organization.¹⁷⁸

The Bakersfield QAU model strengthens its system because it improves the system's intrinsic responsibility. Meadows describes a system's intrinsic responsibility as that which "is designed to send feedback about the consequences of decision making directly and quickly and compellingly to the decision makers."¹⁷⁹ As necessary, the system's ability to maneuver rests on the quality of the feedback. This model grants the system manager the ability to know, almost on demand, most if not all aspects of internal and external performance. This mechanism informs the ability to make targeted decisions for the good of the system and those it serves, much as battlefield intelligence might inform a decisive maneuver in combat.

D. CONCLUSION

Understanding the difficulty in sustaining reforms and measuring police performance, it seems something is missing from the intrinsic responsibility mechanisms of American police organizations. Worden and McLean, Walker, and Brown have all observed some conflict between desired change and its execution. Perhaps, rather than an inability to implement or sustain behavioral change in policing, it is the system structure that fails. Reimagining the way police departments think about and manage their systems—

¹⁷⁸ Christopher Bagby, "Bakersfield Police Department Quality Assurance Unit: Use of Force Inspection Program" (Bakersfield: Bakersfield Police Department, October 29, 2019).

¹⁷⁹ Meadows, *Thinking in Systems*, 179–80.

adopting TQM's system principles to capture and measure meaningful feedback from all parts of the system and those it interacts with—could better inform decision-making and drive lasting behavioral change.

In complex business applications and now policing, the TQM system framework represented in Canada and at the BPD is not merely a mechanism of quality control and assessment of practice to ensure future capital success. It is a system complete with functional, real-time, multi-data, balancing, and reinforcing feedback loops that work as a dashboard for leadership to make real-time organizational adjustments.

The ability to read feedback and make fast, meaningful adjustments to internal policies, procedures, training, discipline, and supervision could create and sustain police behaviors that reflect the organizational goals and values in ways reforms have not. Deployments, organizational strategy, tactics, and social and political responses to incidents informed by external feedback could better exemplify and mitigate community sentiments about policing in near real-time, preserving important police legitimacy. Moreover, learning about both positive and negative system behaviors improves organizational output.

Ideally, a systems approach improves performance in all aspects and creates legitimacy and community confidence. Theoretically, such an approach limits future systemic failures or at least the scope of their damage, thereby creating resiliency. A reflexive, evaluative policing system is a proactive approach that could break the reactivity cycle of reform of policy, procedure, and practice in response to significant American policing failures.¹⁸⁰

As the system and problem spaces that affect policing activities change, both internally and externally, the system can reflexively respond due to its ability to receive, read, and interpret feedback effectively. The TQM system framework creates a reflexive system structure by design. Given the volatility of the act of policing, along with the varied environments in which it occurs and the uncertainty of systemic outcomes, adopting this

¹⁸⁰ Walker and Archbold, *The New World of Police Accountability*.

framework might prove to be the most critical reform undertaken by American policing—if, following the Canadian framework, it were applied nationally and each police system, within its own space, reflexively adapted to its community’s evolution and values. Because every community is different, each police system is unlike the other, but ideally, this framework will help police better customize their service to the community.

The premise of this chapter was that system structure dramatically influences system behavior. The inverse is also true; system behavior can influence the system structure. Without increasing agents’ capacity to become system thinkers and understand the system’s purpose and execute it, any system structure is at risk of failing to perform optimally. On the flip side, optimally performing agents can create a resilient, well-functioning system, even if it is not optimally structured.¹⁸¹ The following chapter discusses the relationships between agents and systems. It discusses how agent behavior reflects the system’s effectiveness and how optimal systems learn to become learning organizations, along with potential applications of these theories in policing.

¹⁸¹ Senge, *The Fifth Discipline*, 283–87.

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IV. BUILDING AGENT CAPACITY TO IMPROVE SYSTEM PERFORMANCE

While Chapter III focused on system structure and improving system performance by establishing a framework for managing systems and monitoring their behavior, this chapter explores systems thinking as a way of improving agent capacity to stabilize and improve system performance. It discusses the way police reformers, activists, and police administrators view training and education. Additionally, it considers the role capacity plays in police systems and police officer performance, as well as the practitioner's role in competent police systems through building learning organizations.

A. REFORM TRADITIONS

Training and education of police officers are core tenets of the police reform playbook. It is simple to say that when bad things happen or police conduct does not meet society's expectations, some correction, particularly in the context of behavior, is necessary. Training and education are easy targets for immediate action. Reformers have a long-held belief that officer competency, specifically competency developed through training and pre-requisite education, holds the key to improving policing. Former police chief and professor August Vollmer's contributions to the 1931 Wickersham Commission report focused, in part, on these areas. Vollmer advocated for traditionally educated police officers to prevent poor performance and corruption.¹⁸² The Wickersham Commission, President Hoover's commissioned panel of experts, attempted to standardize American police performance and root out corruption during the Prohibition era.

A report issued 36 years later by President Lyndon Johnson's Commission on Law Enforcement and Administration of Justice indicated much the same—that police officer education was essential to good policing. The commission concluded, "The quality of police service will not significantly improve until higher educational requirements are

¹⁸² Victor G. Strecher, "Stimuli of Police Education: Wickersham and LBJ'S Commission," *Justice Professional* 3, no. 2 (September 1988): 301, <https://doi.org/10.1080/1478601X.1988.10382993>.

established for its personnel.”¹⁸³ According to Victor Strecher, a criminal justice professor at Sam Houston State University, the overall improvement of education within the policing community could be considered President Johnson’s “invisible achievement . . . regarded as one of his more significant contributions to the quality of life in the United States.”¹⁸⁴

Forty-eight years later, President Obama’s Task Force on 21st Century Policing made training and education of police officers one of its central themes as well.¹⁸⁵ Like echoes of the reports before it, Obama’s task force stated, “The skills and knowledge required to deal with these issues effectively requires a higher level of education as well as extensive and ongoing training in specific disciplines.”¹⁸⁶ The issues referred to in the quote involve the many tasks and roles assigned to police and the varied contextual relationships police officers have to the world. A few paragraphs later, the task force deems these issues the “complexity of the 21st Century.”¹⁸⁷

Interestingly, it seems that were he alive, Strecher might have argued that policing’s complexity is not exclusive to the 21st century. In his comparison of the Wickersham Commission’s and Johnson commission’s recommendations for education and their outcomes, a distinct factor he considered were the contexts of social institutions, technology, education, and other elements that affected police officer and organizational value-making. They changed the way society interacted with police and the way police interacted with society. Strecher might have called factors that seem inexplicably linked to one another “contextual relationships”—known as “complexity” in systems language. To clarify, “context” in the way Strecher uses it means the same thing it does in systems language: the environment with which a system interacts.¹⁸⁸ Context and its related

¹⁸³ Strecher, 301.

¹⁸⁴ Strecher, 317.

¹⁸⁵ President’s Task Force on 21st Century Policing, *Final Report*.

¹⁸⁶ President’s Task Force on 21st Century Policing, 51.

¹⁸⁷ President’s Task Force on 21st Century Policing, 51.

¹⁸⁸ The following chapter of this thesis discusses systems contexts and how they interact with policing in detail.

complexity comprise learning, whether that learning is captured with in-service police training, traditional education, or other means vital to police performance and systems.

B. A LINEAR APPROACH

Obviously, the training of officers plays a central role in police reform. The argument made by reformers is that mindset and performance are indicators of police training's capacity and effectiveness. Walker and Archbold devote 46 pages spread throughout their book to the idea of training police officers to improve behavioral outcomes. The "T" in their aforementioned PTSR framework is training. They write,

Training, it hardly needs to be said, is a basic element of modern police administration, and it represents one of the major achievements of the police professionalization movement of the 20th-century. Training, moreover, must be a continuous and comprehensive effort, including pre-service academy training, mandatory annual in-service training, roll call training, and special ad hoc training for certain officers.¹⁸⁹

Walker and Archbold also argue that many of the incidents that create divides between people and the police, particularly those involving force, boil down to inadequate police officer training.¹⁹⁰

Police reforms deliver training in abundance. As policing failures or, perhaps in many cases, social behaviors amplified by the act of policing are identified, reformers offer and often mandate police training in those areas. Some examples include anti-bias training, community engagement training, procedural justice training, de-escalation training, use-of-force recognition training, sensitivity training, racial profiling training, and—the most recent training trend, directly tied to the George Floyd incident—use-of-force intervention training.¹⁹¹ Use-of-force intervention is the idea that a police officer has a “duty to intercede” when other police officers cross a line in a use-of-force incident.¹⁹²

¹⁸⁹ Walker and Archbold, *The New World of Police Accountability*, 16–17.

¹⁹⁰ Walker and Archbold, 18.

¹⁹¹ President's Task Force on 21st Century Policing, *Final Report*, 51–60; Vasilogambros, “Training Police to Step In.”

¹⁹² Minneapolis Police Department, *Use of Force*.

The training teaches police officers how to intervene effectively rather than, as traditional use-of-force training teaches, how and when it is legal and appropriate to apply different force levels.

The Floyd case is an excellent example of how linear thinking drives policy making, officer training, and law enforcement education. George Floyd died while in police custody. There is some dispute about whether his death was at Officer Derek Chauvin's hands or from a combination of drug overdose and a preexisting medical condition after struggling with officers.¹⁹³ Most people believe that Chauvin, who crouched on Floyd's neck for over eight minutes, killed Floyd by asphyxiation. The cell-phone video depicts an emotionless Chauvin with hands in his pockets as Floyd slowly dies. The video inflamed the world—the apparent callousness of it, the unadulterated violence of watching a man die at the hands of a Minneapolis police officer with three other officers looking on and doing nothing to stop, shook the world.¹⁹⁴

For America's police, much of the Floyd incident's aftermath, not including widespread protests, riots, and calls to defund police, focused on police practices and tactics. Conversations centered on banning actions, such as chokeholds; bolstering training for others, such as use-of-force intervention and de-escalation; and reviewing and revising use-of-force policies. Notably, these conversations happened on a national scale, rather than focusing on Minneapolis, where the incident occurred. Widespread changes in police policy and practice happened in some cases, for instance, New York City's criminalizing all forcible body-weight restraint tactics by police officers.¹⁹⁵ Acting in the wake of what

¹⁹³ Richard Read, "Attorney for Minneapolis Police Officer Says He'll Argue George Floyd Died of an Overdose and a Heart Condition," *Los Angeles Times*, August 20, 2020, <https://www.latimes.com/world-nation/story/2020-08-20/george-floyd-derek-chauvin-defense>.

¹⁹⁴ Hill et al., "How George Floyd Was Killed in Police Custody"; Read, "George Floyd Died of an Overdose and a Heart Condition"; "Officers Charged in George Floyd Killing Seek to Place Blame on One Another," *Guardian*, September 11, 2020, <http://www.theguardian.com/us-news/2020/sep/11/george-floyd-killing-death-officers>; "George Floyd: What We Know about the Officers Charged over His Death," BBC News, June 8, 2020, <https://www.bbc.com/news/world-us-canada-52969205>; "Read: George Floyd Autopsy Report, with Cause of Death," *Mercury News*, June 5, 2020, <https://www.mercurynews.com/2020/06/05/read-george-floyd-autopsy-report-with-cause-of-death-and-other-factors/>.

¹⁹⁵ Ben Chapman, Katie Honan, and Joseph De Avila, "New York City to Ban Police Restraints That Choke People," *Wall Street Journal*, June 18, 2020, <https://www.wsj.com/articles/new-york-city-to-ban-police-restraints-that-choke-people-11592519365>.

eventually amounts to a national disaster is appropriate. There is some place for immediate training to rectify immediate problems, and certainly, learning from others' failures is a wise and appropriate practice to avoid the same fate. The issue is that this reactive way of problem-solving only superficially, if at all, addresses the true problem space. Much of the suggested reforms in George Floyd's aftermath already existed in Minneapolis for some time before the incident occurred.

In the city and agency where this failure of policing occurred, the use-of-force policy approved such restraint methods and trained officers to use them.¹⁹⁶ Also, the department's use-of-force policy explicitly defines an officer's duty to intervene, incorporates a variety of de-escalation tactics, and requires regular training on the use of force.¹⁹⁷ The state of Minnesota mandates specific and regular use-of-force training for pre-service and in-service applications by statute.¹⁹⁸ Minneapolis uses an early intervention system to weed out bad behavior and has done so since 2009. Last, and most important, through its collaborative reform initiative, the DOJ reviewed Minneapolis's use-of-force policy as part of an after-action report on civil unrest related to the Jamar Clark shooting in 2015. It made 71 recommendations related to the incident, including some about the use-of-force policy itself. The report did not mention the tactics used in that incident, nor was the policy criticized.¹⁹⁹ Minneapolis had everything in place to prevent an incident like Floyd's death from occurring, including DOJ-vetted policies. Despite all of the reformed features of modern policing already in place to control behavior, it still happened.

The Floyd incident represents a long-standing question in policing. It is not a question of policy or procedure or changing behavior. The question is understanding how a system can affect its agents and how agents affect their system. The question seeks to

¹⁹⁶ Grace Hauck and Dennis Wagner, "George Floyd Death: Experts Say Knee-to-Neck Restraint Is Dangerous, but Minneapolis Allows It," *USA Today*, May 29, 2020, <https://www.usatoday.com/story/news/nation/2020/05/29/george-floyd-experts-say-neck-restraint-allowed-minneapolis-can-kill/5274334002/>.

¹⁹⁷ Minneapolis Police Department, *Use of Force*.

¹⁹⁸ Minnesota Board of Peace Officer Standards and Training, *Administrator's Manual*.

¹⁹⁹ Straub et al., *Maintaining First Amendment Rights and Public Safety*.

understand how policing as a system, or the microsystem of the Minneapolis Police Department, in this case, could allow the attitudes, beliefs, or, even worse, callousness and negligence exemplified by Derek Chauvin and his partners to exist within it. With plenty of reformed policing practices aligned with much of the pattern-and-practice platform in Minneapolis, all designed to prevent this type of behavior, the search may need to look further than adding features or repackaging reforms. The problem may be more profound than that. It may be that to attain and sustain resiliency, trust, and legitimacy, the system must attempt to understand agent behavior and how to improve it. Better answers may come from addressing or studying the organizational affirmation on some level of Chauvin's historical behavior, perhaps long-standing affirmed behaviors, culminating in the outcomes on that day.

C. THINKING DIFFERENTLY

Worden and McLean's work explores the inconsistency of officer behavior and performance. They demonstrate that some officers perform very well. In contrast, others perform very poorly despite having the same background training and organizational structures and experiences. As part of their discussion about improving future reforms, Worden and McLean identify a need to "learn from these officers what they do and do not do and why. The question implies that we need to understand how officers perceive and interpret their encounters with citizens—the perceptual and cognitive processes that yield different reactions to different stimuli."²⁰⁰

The question of cognitive processes may be the crux of improvement. Perhaps the argument is that training and attempts to control or understand behavior by these agents are less about the agents and more about the system. At the close of their book, Worden and McLean admit,

While we believe that steps to better prepare officers to exercise their authority—including especially searches and the use of force—are the most promising avenues of police reform, extant research offers little evidence about how police organizations can effectively perform these functions. Training and supervision are often mentioned. Such prescriptions rest

²⁰⁰ Worden and McLean, 193–95.

largely on logic and wishful thinking, and certainly not on social scientific evidence.²⁰¹

Peter Senge observes that when efforts to improve performance within a system do not acknowledge their system's existence at the outset, they can prevent progress and create more problems. He describes this phenomenon in the context of systems dynamics pioneer Jay Forrester's work on problems in social systems: "These problems were 'systems' that lured policymakers into interventions that focused on obvious symptoms, not underlying causes, which produced short-term benefit but long-term malaise, and fostered the need for still more symptomatic interventions."²⁰² Training gets used to address symptomology, much like the interventions after the Floyd incident, not the mindsets, values, or education that creates those symptoms.

Dietz and Mink address the same question asked by Worden and McLean but from a systems perspective. They observe that system agents' skills and abilities to apply their "tacit knowledge" with and within the system greatly influence system function.²⁰³ The Floyd incident, and countless other tragedies, demonstrates the opposite to be accurate as well: poorly functioning agents cause systems to perform poorly.

The problem of "bad agent behavior" and how to avoid it in the frame of Worden and McLean's question—whose line of inquiry contrasts with most of the concepts of modern police reform—are of the same problem space used by Walker and those like him. They espouse the values of training and reinforcing good or necessary behaviors in police work. From the systems-thinking perspective, what they are searching for is the system agents' short-term view to balance the system. It falls far short of developing "reflective" agents or learning to apply their tacit knowledge to perpetuate the system, values, and organizational success.²⁰⁴

²⁰¹ Worden and McLean, *Mirage of Police Reform*, 196.

²⁰² Senge, *The Fifth Discipline*, 14–15.

²⁰³ Dietz and Mink, "Police Systems and Systems Thinking," 13.

²⁰⁴ Dietz and Mink, 13.

D. A SHIFTED PERSPECTIVE

Dietz and Mink identify learning as a core component of police system performance. They argue, “The learning process is a nested system within the context of other systems, such as the family, industry, politics (government) and history. New knowledge is nested in, added to, existing knowledge.”²⁰⁵ They contend that much of the thinking about police organizations tends to work from a “standard (tradition)” that treats them as independent systems. As complex adaptive systems, learning is a way of aggregating and adapting to many contextual and historical relationships. Thus, Dietz and Mink argue that learning is a “way of informing [the complex adaptive system’s] future. Learning and knowledge transfer are important to the processes of co-evolution and emergent patterns.”²⁰⁶

It may be that reformers for nearly the past 100 years have attempted to capture the essence of Dietz and Mink’s assessment of learning in police systems. The push for better training and education in police reform may be a conflated argument for better learning practices in law enforcement. One difference may be that reformers think of education as a way of improving or controlling agent behavior to improve system performance, a cause-and-effect relationship. Instead, Dietz and Mink’s way of thinking is that learning builds behavior on experience in lockstep with varied contexts as they evolve and emerge anew. Learning, in their frame, is a part of the complex system that is policing. Learning and the means of learning are system properties.

Dietz and Mink discuss the Austin Police Department (APD)’s interactions with illegal immigrants from Mexico in its jurisdiction to highlight the idea. The APD recognized that due to their unwillingness to cooperate with law enforcement out of fear of deportation and arrest, the Mexican residents found themselves subject to significant predatory crime and little effective law enforcement intervention. In recognizing the problem, the APD instituted some programs to better connect to the people it struggled to

²⁰⁵ Dietz and Mink, 9.

²⁰⁶ Dietz and Mink, 9.

reach, ultimately improving the relationship with that population and law enforcement outcomes.

This simple example captures the idea of learning as it exists in systems and how it exists as complexity within systems.²⁰⁷ First, the APD recognized the desired state and the current state's falling short of meeting it. Second, it created agent capabilities to adapt to the problem. This ability to recognize problems and address them, whether at the agent or system level, is the essence of systems learning.²⁰⁸ Because living systems are made up of people—by and large, systems are groups of people—teaching the system to learn is effectively teaching the people in the system to learn.²⁰⁹ The APD agents' collective understanding of the system's problem made up the system's response. In this example, learning existed in multiple contexts, and its interactions affected the rest of the system and vice versa. Rather than controlling or “fixing” behavior, this approach exemplifies Dietz and Mink's advocacy for learning as a philosophical system foundation to “allow the policing system to anticipate better the needs of the citizens they serve.”²¹⁰ In their systems frame, learning is an ongoing cooperative process that allows agent behavior to adapt based on the system's needs.

E. A BETTER WAY OF THINKING ABOUT PROBLEMS

Senge describes three basic ways of thinking about problem spaces: reactive, responsive, and generative. Reactive or event-based explanations are the lowest order; they focus on moments in time, or single-slice issues. Responsive explanations consider “patterns of behavior.” They consider the actions and attitudes that create issues within the system. They consider more than basic reactivity but still do not understand what causes the patterns; they seek to address them within their own space. Generative explanations

²⁰⁷ Gell-Mann, “Complex Adaptive Systems,” 18.

²⁰⁸ Carolina Machado and J. Paulo Davim, eds., *Transfer and Management of Knowledge* (Hoboken, NJ: Wiley, 2014), 301–4.

²⁰⁹ Machado and Davim, 288.

²¹⁰ Dietz and Mink, “Police Systems and Systems Thinking,” 9. Learning this way optimizes system performance at the agent level. It comprises both an input–output and feedback mechanism for internal and external performance.

are, as Senge describes, “the most powerful.”²¹¹ They seek to identify what causes “patterns of behavior,” which change the course of events. Generative problem-space explanations address the entire system inside and out. They are relevant to policing because “the structure in human systems includes the ‘operating policies’ of the decision-makers in the system, [so] redesigning [their] own decision-making redesigns the system structure.”²¹²

System structure influences system behavior. Senge calls learning organizations the products of the “theory of enacted systems.” This means that in action, the leverage to change systems does not focus on behaviors or events. Instead, it focuses on underlying structures made up of pieces he calls the deep-learning cycle: “beliefs and assumptions, established practices, skills and capabilities, networks of relationships, and awareness and sensibilities.”²¹³ Additionally, the cyclical dependence on system structure and behaviors, each influencing the other, is intentional. It is vital for a system of people acting within it, a social system, to become an environment that generatively learns from its interactions while shaping the system’s structures in the process.²¹⁴ As much as anything, this means that the system must be built, trained, and attuned to learning about itself, not just structurally but culturally and administratively. The system has to become evaluative of itself as a priority, as do the system’s agents, because the relationships between system structure and system behavior are proportional.²¹⁵

Donald Schön would call this same process “reflection in action.” He argues that a reflective practitioner’s development occurs in part through experience, a kind of patterned sense-making of uncertain causal relationships and volatile complex situations. He argues that reflection in action gives practitioners insight that cannot be gained in other ways.

²¹¹ Senge, *The Fifth Discipline*, 52.

²¹² Senge, *The Fifth Discipline*, 51–54; Machado and Davim, *Transfer and Management of Knowledge*, 296.

²¹³ Senge, *The Fifth Discipline*, 286; Hisyam Selamat Mohamad and Choudrie Jyoti, “Using Meta-abilities and Tacit Knowledge for Developing Learning Based Systems: A Case Study Approach,” *Learning Organization* 14, no. 4 (2007): 342, <https://doi.org/10.1108/09696470710749263>.

²¹⁴ Senge, *The Fifth Discipline*, 286–87.

²¹⁵ Machado and Davim, *Transfer and Management of Knowledge*, 299.

Reflection in action is the process of assessing while doing.²¹⁶ This idea of assessment within and about a system's structure by its agents converges Senge's and Schön's ideas on generative problem-solving.²¹⁷ Self-assessment is the central element to learning organization theory as it applies to policing systems. The easiest way to think about deep learning and reflection in action is that they are essentially teaching agents how to assess fundamentally and perpetually feedback from various sources and learn from them in real time. It is a process of acting on that assessment while making it, thereby influencing their behavior, the system's behavior, and potentially the system's structures.²¹⁸

If system behavior can dictate system structure and vice versa, system structures and behavior include value behavior and culture. Therefore, in a sense, emphasizing the philosophical values of a learning organization can create a mirrored emergent value-based structure that interweaves the philosophy into the elements of the problem and solution spaces, thereby aligning philosophy and solution. Rather than merely suggesting that police departments learn to be learning organizations, emphasizing practitioner learning as a philosophy might allow the learning organization concepts to take root and grow organically within the philosophy and practitioner competency level.²¹⁹

F. THE SINGAPORE EXAMPLE

In *The Fifth Discipline*, Senge highlights the Singapore Police Force (SPF) and its commissioner, Khoo Boon Hui, as part of a national movement to become a "learning nation." This police force changed its culture and developed practitioner capacity while having dramatic effects on the quality of the organization and its effectiveness.²²⁰ Commissioner Khoo realized that his organization had not been designed to meet the

²¹⁶ Schön, *The Reflective Practitioner*, 68.

²¹⁷ Machado and Davim, *Transfer and Management of Knowledge*.

²¹⁸ Gary A. Klein, *Sources of Power: How People Make Decisions* (Cambridge, MA: MIT Press, 1998), 147–65.

²¹⁹ Machado and Davim, *Transfer and Management of Knowledge*, 290–91.

²²⁰ Senge, *The Fifth Discipline*, 278; James Low, "Milestone Programs for the Administrative Service in the Singapore Public Service," in *Sharpening the Sword of State: Building Executive Capacities in the Public Services of the Asia-Pacific*, ed. Andrew Podger and John Wanna (Acton: Australian National University Press, 2016), 184.

world's uncertain, complex, and emerging threats, recognizing that the SPF was not attuned to adaptation, growth, or generative problem-solving. Khoo had trouble recruiting high-quality officers because the work was menial and unrewarding, and he noticed that his officers had not been trained as thinkers, as they relied on strict policy adherence and tightly coupled management. The SPF was unprepared to meet the challenges of modern policing.²²¹

Recognizing that his organization was foundering, Commissioner Khoo began changing the culture toward “one of trust and openness through investing in organizational development.”²²² The organization, like many in the United States, had previously developed its community-policing programs and integrated, on some level, its officers into the communities they policed. They built on that philosophical foundation and “enlarged their job scopes” while simultaneously increasing their foundational knowledge of generative problem-solving and systems thinking. The officers learned to network and communicate with others in their agencies and communities and were empowered by the management. They took ownership of their problem and solution spaces by being proactive, collaborative, and adaptive to new ideas and diverse partnerships.²²³

Intentionally, and as part of the outgrowth of the learning organization principles in action, the SPF focused on developing leadership capacity at every rank to amplify its abilities. It incorporated value training and increased responsibility as part of the training to ensure that as the agents were empowered, they were knowledgeable about the organizational goals and values and capable of achieving them without strict oversight. As the SPF began morphing into a learning organization, it focused on capturing and sharing its collective knowledge and incorporated training and after-action reports. It made deliberate efforts to create reflection opportunities throughout to “broaden awareness

²²¹ Senge, *The Fifth Discipline*, 278; Low, “Milestone Programs,” 185–87.

²²² Senge, *The Fifth Discipline*, 278.

²²³ Senge, *The Fifth Discipline*, 278–79; Low, “Milestone Programs,” 196–98; Jansen Ang et al., “Operations Psychology: The Singapore Police Experience,” *Journal of Police and Criminal Psychology* 26, no. 2 (2011): 71–73, <https://doi.org/10.1007/s11896-010-9080-9>; Deniz Kocak, *Rethinking Community Policing in International Police Reform: Examples from Asia*, SSR Paper 17 (London: Ubiquity Press, 2018), 24–26, <https://www.jstor.org/stable/j.ctv6zdc57>.

across the system.”²²⁴ Commissioner Khoo refocused the SPF’s policies and procedures “to stress principles rather than prescriptive instructions, to facilitate the exercise of discretion based on best practices.”²²⁵

The last meaningful change Commissioner Khoo made to his system was to incorporate networks of relationships to increase his organization’s capacity for knowledge. He did not rely on his own agency’s experience or solely on law enforcement agencies; he sought out people, including community members and academics, from other areas to advise his organization on policing. His stated goal was to gain a wide range of perspectives from which his organization could learn to approach its problem spaces generatively.²²⁶

Under Commissioner Khoo’s leadership, the SPF became a more effective, responsive police organization. By leveraging the power of the learning organization built through investing in agent capacity, Commissioner Khoo’s SPF saw significant reductions in crime, improved employee performance, and relationships with its communities that had not existed before. Speaking in 1994, he observed an added benefit: “Today, the police force recruits more than its fair share of highly educated job seekers.”²²⁷

The SPF is illustrative of an organization that transformed itself into a learning organization by investing in its practitioners and improving its ability to interact with the system. Providing support for Senge and Schön’s synthesized theories, as the organization invested as a system in its agents, their behavior changed its structure. Creating better capacity in agents resulted in better performance and better system responsiveness, growth, emergence, and even recruiting of higher capacity agents in the long run. The SPF example also demonstrates how agent capacity and generative thinking about problem spaces can

²²⁴ Senge, *The Fifth Discipline*, 279.

²²⁵ Senge, *The Fifth Discipline*, 279; Low, “Milestone Programs,” 201–5; Vivien K. G. Lim, Thompson S. H. Teo, and Sean K. B. See, “Perceived Job Image among Police Officers in Singapore: Factorial Dimensions and Differential Effects,” *Journal of Social Psychology* 140, no. 6 (2000): 740–50, <https://doi.org/10.1080/00224540009600514>.

²²⁶ Senge, *The Fifth Discipline*, 279–80; Ang et al., “Operations Psychology,” 71–73.

²²⁷ Senge, *The Fifth Discipline*, 280.

create better employee satisfaction, creativity, personal investment of agents in the system, and organizational pride.

U.S. policing systems can learn much from how the SPF improved its performance and interaction with other systems. The following details the key takeaways:

- Commissioner Khoo assessed his organization and identified practitioner capacity as a point of deficiency in the system space effectiveness.
- As an organization, the SPF built on its already sound philosophy. It started from a place of existent capacity and improved upon it.
- The SPF undertook a deliberate effort to modify its culture to become a “practicing while practicing” environment.
- The organization invested in practitioner capacity and engaged with its internal management systems to improve external output while integrating systems thinking principles.
- It developed and integrated collaborative learning and built out collaboration capacities.
- SPF employees were entrusted with the system’s values and empowered to act upon them.
- Understanding collective thinking power, the SPF branched out into academia and other sectors to collaborate on innovative and creative solutions.

As an aside, Singapore’s performance as a police organization consistently outperforms most of the world. Admittedly, its naturally flat government—as all police functions exist at the federal level, as do all related bureaucracies—harsh criminal penalties, and relatively small size as an island nation help Singapore succeed in ways many others cannot. All the same, Singapore regularly ranks as one of the least corrupt police organizations and safest cities globally. In a 2019 study conducted by the *Economist*,

Singapore ranked second overall for safety and first for personal safety. It has held similar rankings since the early 1990s.²²⁸

G. CAPTURING SUCCESS IN DIFFERENT SYSTEM SPACES

An example like the SPF shows that regardless of its success, it does not compare with any other law enforcement agency in the United States. The SPF is a state agency, meaning it is the principal law enforcement agency for Singapore's entire nation.²²⁹ There are more than 18,000 separate police agencies in the United States, each within its own problem spaces and system spaces. In Singapore, the macrosystem and microsystem are the same. Nevertheless, as demonstrated in later chapters, microsystems can affect macrosystems dramatically and vice versa. Therefore, the opportunity to leverage the Singapore example still exists. Similarly, Commissioner Khoo assessed his organization and found his own problem space to approach generatively.

Because every system is different and relates differently within its environment, its competencies and vulnerabilities, values and philosophies, and challenges will vary. This approach, the marriage of practitioner competency to system ability, should provide access and leverage points throughout to deal in problem spaces and solution spaces generatively and perpetually if appropriately approached, as demonstrated in the Singapore example. There is one caveat to this assertion. For every Singapore, there must be a Commander Khoo. The framework was sound because the executive's vision was sound, and the cultural creation that he oversaw established the environment for capacity growth and system capacity-building.

H. FOUNDATIONAL CAPACITY-BUILDING FOR SYSTEMS AND PRACTITIONERS

The idea of practitioner capacity-building synthesizes Dietz and Mink's research on contextual learning, Senge's generative problem-solving, and Schön's reflection in

²²⁸ Jon S. T. Quah, "Curbing Police Corruption in Singapore: Lessons for Other Asian Countries," *Asian Education and Development Studies* 3, no. 3 (2014): 202–4, <https://doi.org/10.1108/AEDS-07-2014-0029>; Paul Kiestra, *Safe Cities Index 2019*, (London: Economist Intelligence Unit, 2019), 5, 20, <https://safecities.economist.com/safe-cities-index-2019/>.

²²⁹ "Home Page," Singapore Police Force, accessed October 11, 2020, <http://www.police.gov.sg/>.

action.²³⁰ As illustrated by the example of the SPF, competent system agents can dramatically improve the system's performance while both stabilizing and reinforcing it. Given that each agency in the United States has different challenges, the research has identified two areas where practitioner capacity-building might best start: shared visions and learning. In these areas, a shift in thinking, both culturally and structurally, might benefit the various American police systems regardless of their problem and system spaces. Building shared visions and better learning are universal to learning organizations. Additionally, they improve agent capacity and have limitless applications. Improved agent capacity sets the stage for improved system performance and helps build learning organizations.²³¹

I. SHARED VISIONS

Peter Senge argues that a shared vision is important to the learning organization because generative learning occurs only when people are passionate about achieving the goal. He argues that an “extrinsic vision,” that is, outwardly focused—an increased profit margin for a corporation or police legitimacy in American policing—is mostly transitory. There is a limitation to extrinsic vision-making. Senge argues that the goal changes once it is achieved, and the posture shifts to not losing the initial success. Senge suggests that intrinsic goals are more attuned to an abstract state of being—“excellence” is the example he uses.²³² A problem with an extrinsic goal for policing is that no global, static end-state is achievable. There is no end-game success. So long as the world is a malleable place, fraught with surprise, evil, and disorder, policing cannot achieve a static end-state. This is the nature of complexity.²³³

²³⁰ Machado and Davim, *Transfer and Management of Knowledge*.

²³¹ Neo Tse Kian and Sahar Sabbaghan, “The Relationship between Gardner’s Multiple Intelligence and Kolb’s Learning Style,” *International Journal of Knowledge and Systems Science* 3, no. 3 (2012): 53, 58, <https://doi.org/10.4018/jkss.2012070105>; Oscar Rantatalo and Staffan Karp, “Collective Reflection in Practice: An Ethnographic Study of Swedish Police Training,” *Reflective Practice* 17, no. 6 (2016): 720–21, <https://doi.org/10.1080/14623943.2016.1206881>.

²³² Senge, *The Fifth Discipline*, 192.

²³³ Gell-Mann, “Complex Adaptive Systems,” 18.

In the example of the SPF's leadership, led by Commander Khoo, it set intrinsic goals of self-assessing and deliberately seeking improvement. It developed a culture that valued challenging the system, becoming reflective about its practices, and collaboratively solving problems by knowing or seeking those who could help achieve that end state. The SPF was intentional about improvement in every facet of the organization. The results were improved output, performance, workplace satisfaction, and hiring and retention.

Shared visions are vital to sustaining the success of organizational change. They provide meaning in the cause of an undertaking. Philosopher Viktor Frankl reflected that "the will to meaning," a desire to find meaning as a human being, is the single greatest pursuit of existence. He maintained that once a person finds meaning, she will endure anything so long as the purpose of that meaning remains intact. The highs and lows of creating a culture, the victories and failures, along with any derived emotional responses, have less effect on those to whom the vision's meaning is exact. Frankl's work demonstrates a distinct resiliency in finding a meaning of value and holding fast to it.²³⁴

A shared vision can also help create a culture of self-regulation and a collective sense of responsibility. Tamler Sommer's studies of honor cultures found that in the Navy SEAL culture, the process of indoctrination and togetherness of purpose in training and operating together create a culture in which a "sense of collective responsibility . . . further strengthens the bonds within the group."²³⁵ Additionally, Sommers observed a sense of shared responsibility for individuals' failures within the group and a balancing effect of participant behavior. The opposite is true, as well. A shared sense of responsibility rooted in a healthy honor culture can create a sense of pride when members act "virtuously or honorably."²³⁶

In some aspects, a shared vision or a collective goal surpasses expertise or skill when increasing capacity. Willink and Babin, Navy SEAL commanders and leadership experts, write, "Far more important than training or equipment, a resolute belief in the

²³⁴ Viktor E. Frankl, *Man's Search For Meaning* (New York: Simon and Schuster, 1985).

²³⁵ Tamler Sommers, *Why Honor Matters* (New York: Basic Books, 2018), 83.

²³⁶ Sommers, 85.

mission is critical for any team or organization to win and achieve big results.”²³⁷ General Jim “Mad Dog” Mattis echoes this assertion in stating that harmonious, effective units are teams in which everyone involved understands and supports the mission.²³⁸ Finally, General Stanley McChrystal writes that expertise is essential, but so too is understanding the system’s design, goals, and nuances. General McChrystal calls this process “shared consciousness.”²³⁹

Military commanders’ observations are particularly poignant because the environment in which they draw their expertise is similar to the problem spaces understood by Commander Khoo of the SPF. Volatility, uncertainty, and complexity are fundamental elements of the modern battlefield, and tightly coupled command structures are not ideal for meeting those challenges. By virtue of its mission spaces and basic structures, the military has much to impart about teaching and learning. In his research on building learning organizations, Senge points out that military organizations, notably the United States Army, are among the most consistent cultures to promote learning and do so effectively.²⁴⁰

Distinguishing between military leadership structures and those of the police is essential because they are fundamentally different. Military commanders are easily fireable without cause at their commanders’ whim based on an “on-the-spot” assessment of their performance or a failure to reach milestones. In police organizations, firing a leader or subordinate is fraught with all kinds of difficulty ranging from basic employment laws to union protections and interference. What is more, military commanders have a seemingly infinite supply of subordinate commanders from which to draw while police organizations do not. This does not invalidate their observations about leading, commanding, or creating a healthy capacity-building culture, especially in volatile, ambiguous environments. It does

²³⁷ Jocko Willink and Leif Babin, *Extreme Ownership: How U.S. Navy SEALs Lead and Win* (New York: St. Martin’s Press, 2015), 77.

²³⁸ Jim Mattis and Bing West, *Call Sign Chaos: Learning to Lead* (New York: Random House, 2019), 16.

²³⁹ Stanley A. McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (New York: Penguin, 2015), 153–54.

²⁴⁰ Senge, *The Fifth Discipline*, 313–14.

mean that nurturing shared visions organically over time is vital to their success. For police organizations, collaboration, empowerment, and value-based priority-making that emphasize participation and organizationally minded succession-planning might offset some of the differences, as it has in Singapore.

J. LEARNING

Oscar Wilde said, “Education is an admirable thing, but it is well to remember from time to time that nothing that is worth knowing can be taught.”²⁴¹ This quote sums up in many ways the dichotomy between the role of training, inclusive of experience, and formalized education in policing. Education has fundamental value to all of society, but in policing as a profession, there is less emphasis placed on it than tenure, experience, and formalized police training. In 2020, the International Association of Chiefs of Police published its support for higher education standards.²⁴² Education is essential, but so too is operator knowledge. There is no need to favor one over the other, but there should be a balance. Commander Khoo and his organization sought to create collective knowledge by integrating resources, experience, and education.

Surprisingly, despite the emphasis placed on training by reformers and police administrations, there is little emphasis on learning and foundational training. For instance, California requires a high school diploma; 664 police academy hours, including more than 60 hours of testing on laws and procedures; and 560 field training hours, for a total of 1,224 total hours of training to earn the necessary peace officer certification in that state.²⁴³ Also, every peace officer must complete 24 hours of training every two years, 14 of which are required for “perishable skills training” such as firearms training, arrest control, driving,

²⁴¹ Oscar Wilde, *Intentions* (London: Heinemann and Balestier, 1891), 92.

²⁴² “IACP Policy Framework for Improved Community-Police Engagement,” International Association of Chiefs of Police, accessed October 9, 2020, <https://www.theiacp.org/sites/default/files/IACP%20Policy%20Framework%20for%20Improved%20Community-Police%20Engagement.pdf>.

²⁴³ “Regular Basic Course Training Specifications,” California Commission on Peace Officer Standards and Training, accessed October 9, 2020, <https://post.ca.gov/regular-basic-course-training-specifications>.

and interpersonal communication.²⁴⁴ By contrast, California requires cosmetologists to have a 10th-grade education and train 1,600 hours, plus take a certification exam to obtain a cosmetology license. That means after achieving the basic level of certification necessary in the state, a police officer would have to serve an additional 31+ years to receive the same level of mandated training as a brand-new hairdresser in California.²⁴⁵

This disparity does not account for other non-mandated professional training or specialized training. To be fair, many, if not most, agencies require additional training for career development or specialization. However, it is surprising—given the authority and the routine tasking of police officers to make sense of life-or-death situations in a matter of moments with limited information—that there is not a higher emphasis placed on the concept of expertise. Most other professions in which such decisions occur, emergency room physicians, for instance, require 11–12 years of training, both formal and experiential, before certification in their field. Additionally, they are required to pass an exam and apply annually for licensure.²⁴⁶ In addition to their formal police training, only about 30 percent of police officers have bachelor’s degrees, and fewer than 6 percent have graduate degrees.²⁴⁷

Even in the realm of vocational training as competent operators in volatile, complex environments, the American investment in training police officers does not approach creating expertise. Consider the inverse with the military’s elite operators. The lives of U.S. Army Green Berets are “mostly filled with training. It is the key to any expertise and, thus,

²⁴⁴ “Commission Procedure D-2: Continuing Professional Training and Perishable Skills,” California Commission on Peace Officer Standards and Training, accessed October 9, 2020, <https://post.ca.gov/Commission-Procedure-D-2-Continuing-Professional-Training-and-Perishable-Skills>.

²⁴⁵ 1,600 hours - 1,224 hours = 376 hours/24 hours every 2 years = 15.66 training sessions (x 2 bi-annual trainings required) = 31.33 years to receive same number of mandated hours. Law enforcement is given far more training opportunities on myriad topics, but this figure represents solely what is *required*. “Frequently Asked Questions,” California Board of Barbering and Cosmetology, accessed October 9, 2020, https://www.barbercosmo.ca.gov/forms_pubs/publications/faqs.shtml.

²⁴⁶ “How to Become an Emergency Medicine Physician,” Hospital Careers, accessed October 9, 2020, <https://www.hospitalcareers.com/career-paths/how-to-become-an-emergency-medicine-physician/>.

²⁴⁷ “How Educated Should Police Be?,” National Police Foundation, accessed October 9, 2020, <https://www.policefoundation.org/study-examines-higher-education-in-policing/>.

it follows that the most skilled soldiers have the most training.”²⁴⁸ In contrast, police officers spend almost all their time in an operational posture with very little devoted to training. One of the reasons for this may be that police training has historically focused on interactional expertise. This practice’s idea is that formalized education does not prepare one for an ambiguous environment like crime fighting. Only experience will suffice. Soldiers, particularly elite soldiers, must have long periods of insular training to ensure their survival long enough to achieve elite status. Police officers, on the other hand, can only become elite through experience in policing situations. This idea evokes Schön’s description of practitioner expertise:

As practitioners experience many variations of a small number of types of experiences many variations of a small number of types of cases, he is able to “practice” his practice. He develops a repertoire of expectations, images, and techniques. He learns what to look for and how to respond to what he finds. As long as his practice is stable in the sense that it brings him the same types of cases, he becomes less and less subject to surprise. His knowing-in-practice tends to become increasingly tacit, spontaneous and automatic, thereby conferring upon him and his clients the benefits of specialization.²⁴⁹

Experience is an invaluable teaching tool. It allows for reflection in action. However, experience alone as a teaching method fails to teach people how to learn, assess, evaluate, and challenge their problem spaces. Without understanding how to learn, Dietz and Mink argue, experience does not have contextual depth. Without learning how to capture learning both as individuals and as systems, exposure to new problems and solution spaces not directly contained in that environment’s past experiences have little value in informing the future.²⁵⁰

²⁴⁸ Linda Robinson, *Masters of Chaos: The Secret History of the Special Forces* (New York: Public Affairs, 2004), 114.

²⁴⁹ Schön, *The Reflective Practitioner*, 60.

²⁵⁰ Dietz and Mink, “Police Systems and Systems Thinking,” 12–15; Mohamad and Jyoti, “Using Meta-abilities and Tacit Knowledge,” 323–25; Cynthia T. Matthew, Anne T Cianciolo, and Robert Sternberg, *Developing Effective Military Leaders: Facilitating the Acquisition of Experience-Based Tacit Knowledge*, Technical Report 1161 (Washington, DC: U.S. Army Research Institute for the Behavioral and Social Sciences, 2005), 29–32; Rantatalo and Karp, “Collective Reflection in Practice,” 708–9.

Colloquially, the size of the craftsman's toolbox limits the number of his tools, and his inability to learn limits how he can use the tools available. In that environment, there is little room for creation, innovation, and agility. This is not to diminish the value of experience. Schön's work unequivocally demonstrates that experience has intrinsic value in any complex environment like policing. The problem here is not that experience is irrelevant or invalid, but experience alone without understanding how to think and learn alongside it is insufficient.

General McChrystal, in his book *Team of Teams*, writes about the value of education to a practitioner: "Education requires fundamental understanding which can be used to grasp and respond to a nearly infinite variety of threats; training involves singular actions, which are only useful against anticipated challenges. Education is resilient, training is robust."²⁵¹ One could argue that learning happens through education. Often thought of as traditional formalized study of material, such as at a university or college, education has many more applications. Indeed, a formal education teaches one to learn better, but it is not the only way to learn nor, in some applications, the best way to learn. Schön's life's work toward understanding the innately honed skills of practitioners and the high esteem held by Dietz and Mink of the tacit knowledge of skilled police practitioners demonstrate that anything thought about correctly and learned deeply through practice and reflection can become an education.

Through deep learning, exploration, and reflection of both problem and system spaces, education provides a larger toolbox, access to more tools, and permission to explore how to use them differently. It does not detract from the reflection in action available to an experienced expert practitioner. It enhances it to include the world around it. General Mattis observed that his experiences as a leader taught him that his education was important, and that of his subordinates was as well. He wrote that educating practitioners by making them read and reflect on that reading by quizzing them on their thoughts about what they had read provided them with mental models to frame the command's goals and objectives to carry them out with their designed intent. He argued that the Marine Corps'

²⁵¹ McChrystal et al., *Team of Teams*, 153.

experience was not enough to sustain mission readiness or the ability to carry it out effectively.²⁵² At the same time, the reflection about reading through quizzes made the Marines more thoughtful about the things they learned through reading. This partnership of learned thought and practicality in the application seems important. It is another way of managing and perpetuating essential knowledge in an organization while creating a culture that values those things.²⁵³

The foundational importance of the ability to learn helps build not only better operators but better leaders. The targeted expertise of police officers does not equate automatically with command. Mattis argues that commanders must exemplify that which they wish to instill in their subordinates, leading back to the idea of shared visions. He argues much as Schön does that expertise is gained from practicing practice and learning how to transform experiences into knowledge learned from them. Mattis articulates that it is crucial to practice practicing everything from values to education. Educated leaders who exemplify and value education, initiative, and maverick thinking—or risk-taking—will create the same in their subordinates.²⁵⁴

Mattis argues that a leader who does not add value to the organization is akin to a decorative plant in a hotel lobby: a decoration of no real use. He argues that leaders who “haven’t read hundreds of books, learning from others who went before you, . . . are functionally illiterate—you can’t coach and you can’t lead.”²⁵⁵ Mattis’s point here is much like Commander Khoo’s from a different perspective. Building learning capacity improves the organization. Commander Khoo’s concern was his operators’ capacity while General Mattis is speaking of leadership’s capacity to create environments in which all other operations can thrive. Leaders require not only the competency of the craftsman but the

²⁵² Mattis and West, *Call Sign Chaos*, 42.

²⁵³ Mohamad and Jyoti, “Using Meta-abilities and Tacit Knowledge”; Leah Tomkins and Eda Ulus, “‘Oh, Was That “Experiential Learning”?!’ Spaces, Synergies and Surprises with Kolb’s Learning Cycle,” *Management Learning* 47, no. 2 (2015): 158–78, <https://doi.org/10.1177/1350507615587451>; Rantatalo and Karp, “Collective Reflection in Practice.”

²⁵⁴ Mattis and West, *Call Sign Chaos*, 235–36, 242–43.

²⁵⁵ Mattis and West, 237–38.

confidence and self-mastery of the artisan.²⁵⁶ Mattis's experience in this area is crucial because he has a background in systems thinking. He equates this eloquent comparison of the craftsman, tactician, artisan, and reflective thinker to systems and leading them. He explains that feedback from the people within his living systems of command was integral in his development as a commander and in subordinate leaders' growth.²⁵⁷ Systems as structures for learning work both up and down the chain of command.

In the end, it may be that policing can no longer be considered a vocation where experience and vocational training make up much of its foundational skill-building. Nor is it sufficient to call it a profession akin to those in which higher education alone captures the essential skills needed to mitigate a high degree of societal risk of failure. It may be that society at large, individual cities, and counties invest in educating and training police officers to a level of elite practitioner status. If the ability to be critical and reflective is the product of increased capacity, it certainly bears strong consideration. Given budgetary and hiring difficulties for police agencies across the United States, that sort of investment seems unlikely and unrealistic. In the long term, there seems to be a credible argument to formalize the need for undergraduate education for entry into the police service in the United States and graduate-level education for executive-level managers.

In the short-term, there is potential for a hybrid knowledge-based solution that leverages the expertise of policing, along with the foundational understanding of traditional or formal education, to create agents capable of discerning in real time. Figure 2, adapted from David Kolb's learning style inventory, might best represent the approach both to identify ways to increase the capacity for learning and to understand the different approaches to learning in practice.

²⁵⁶ Mattis and West, 238–39.

²⁵⁷ Mattis and West, 238–41.

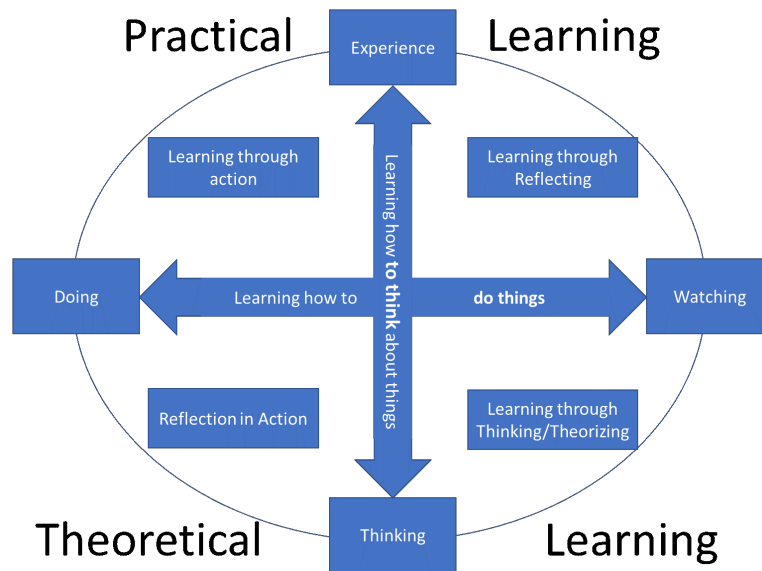


Figure 2. Learning Style Inventory²⁵⁸

Kolb argues that varying approaches to teaching and capturing learning has benefits for organizations because people learn different things in different ways. Moreover, different types of learning leave room for cross-pollination of learning across many different sub-learning types. Additionally, Kolb has found that learning sophistication, a robust ability to learn from different stimuli, comes from “the dual dialects of the learning process, conceptualizing and acting.”²⁵⁹ In other words, learning best occurs when it involves both a theoretical and practical experience frame.²⁶⁰

Based on this research, it seems a combined approach of increased in-service training hours and foundational academic topics introduced in a sort of “in-service university” setting could serve that purpose. Increasing opportunities to learn to capture individual expertise and share it across the organization while promoting practices of

²⁵⁸ Adapted from Kian and Sabbaghan, “Gardner’s Multiple Intelligence and Kolb’s Learning Style,” 54.

²⁵⁹ Kian and Sabbaghan, 58.

²⁶⁰ Kian and Sabbaghan, “Gardner’s Multiple Intelligence and Kolb’s Learning Style,” 57–58; David A. Kolb, *Toward an Applied Theory of Experiential Learning* (Cambridge: Massachusetts Institute of Technology, 1974).

reflection and sharing of tacit knowledge, through both experiential and theoretical applications, would improve learning throughout the organization.

In the same way that Commander Khoo expanded his organization's collective knowledge, so too could American agencies introduce relevant and current academic topics and forge partnerships with universities and scholars. Additionally, robust after-action review procedures, expert lectures, and information-sharing platforms could share experiences and increase agent awareness and wisdom, in a sense, by proxy. Additionally, professional expert educators could play a central role in teaching police personnel how to think in systems and learn about learning.

Akin to the medical and education industries, another option involves establishing industry practices to hire officers conditionally upon completing their requisite education levels during preset time frames. Another is to heavily incentivize and promote tuition reimbursement for employees to improve their foundations. Additionally, federally funded programs like the Center for Homeland Defense and Security offer tuition-free educational experiences to homeland security leaders, including police officers, at no cost to the officer or the agency.

K. CONCLUSION

Police reformers, activists, and police administrators want police departments to train “bad behavior” out of police officers to prevent the recurrence of previously exhibited destructive behaviors. Instead of thinking about what caused that behavior or even what made it possible in the first place, they choose a reactive solution and address the problem in its most spartan space. This way of thinking fails to capture the complexities of the problem space that causes the behaviors in the first place. Little if any energy is expended in teaching them how to think or, more importantly, providing them with the tools to think about the system, their role within it, or how it and they as agents of the system affect other systems.

Alternatively, leveraging the living system to improve agents' capacity will improve their competency and ability to think better in real time and improve the system critically. Like that of the SPF, an effort to self-assess and identify deficiencies will reduce

the number of future deficiencies or failures and have a reinforcing effect. Generative thinking is an opportunity to improve the system and agent behavior intentionally and create functional learning organizations. Focusing on shared visions in goals and values and improving officers' education, specifically the ability to learn from their experiences and those of their colleagues, could increase, albeit proportionally, depending on the microsystem's problem and the system space's capacity for growth. It could aid in developing not only competency but also better, more resilient systems.

As shown in the SPF example, the ability to intentionally and deliberately understand a system's state is an integral concept in capacity-building and system improvement. An organization's ability to assess its problem and system spaces, capabilities, strengths, and weaknesses is central to its ability to adapt or change to suit its environment's complexity or volatility.

Police agencies, as microsystems, within their value structures, could determine how reflective, competent, and beneficial their systems and system agents are and work toward identifying points of leverage for improvement. The process of self-assessment is foundational to any version of competency, both as organizations and as practitioners. Each is related to the other. Therefore, for systems and agents, this process of improvement, evaluation, and assessment must remain effective to grow healthy systems and competent practitioners.

The next chapter considers the goals set for policing and how systems work together to achieve their goals. It considers the difficulty of goal-setting in police systems; the environments, or "contexts," in which they do so; and potential solutions to managing goals within difficult or conflicted contexts.

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V. SYSTEM CONTEXT AND GOAL-SETTING

The research in this chapter demonstrates, in part, that the goals set for police by police reform experts do not deliver the promised outcomes. Compounding the problem, the complexities of system environments—called system contexts—with which police organizations must exist may prevent them from achieving their goals. In systems, goals are vital as they steer the system’s focus. A new approach that bifurcates police organizations’ “strategic voice” and “tactical agency” may improve the way policing interacts with conflicting system contexts. This approach may be a path forward by setting the stage for a central goal-setting philosophy rooted in policing’s ideal system state. Clear universal goals could improve system performance, not only stabilizing America’s police service but allowing it to influence its system and problem spaces in ways unheard of previously.

No matter how one chooses to think about modern reforms and their effectiveness, whether in a systems or sociological context, one truth exists. People want better policing than they have had in the past. A 2020 Gallup poll reported a vast majority of Americans support police reform.²⁶¹ In the wake of the national and local conversations about American policing following the George Floyd incident, Americans recognize a need to reevaluate how the United States polices *and* how it reforms departments.

A. SEATTLE’S REFORM AGENDA

The research in this chapter centers on the example of Seattle, Washington, as a microcosm for modern reformed policing and the many problems that influence it. Seattle’s unique experiences and the unique time and place make it an excellent exemplar for modern policing research. The research could easily focus on most major reformed cities in America. However, Seattle’s experiences are distinctive, yet the problems created for policing there are not exclusive to that city.

²⁶¹ Steve Crabtree, “Most Americans Say Policing Needs ‘Major Changes,’” Gallup, July 22, 2020, <https://news.gallup.com/poll/315962/americans-say-policing-needs-major-changes.aspx>.

From a reform perspective, the Seattle Police Department (SPD) is a deluxe model. President Obama honored the department as a model reformed police agency in his 2016 State of the Union Address.²⁶² The SPD entered into a consent decree with the DOJ in 2012. While the federal court overseeing Seattle's police reforms declared the department in compliance with the consent decree agreement for the first time in 2018, it ordered an additional two years of monitoring to study the sustainment of police reforms there.²⁶³

The agency boasts one of the most liberal use-of-force policies in the nation, near real-time data transparency, community oversight, and outreach. It has robust crisis intervention, homeless support teams, crime prevention, and citizen-concern working groups. Seattle's reforms sought to alter the perception of disparate policing, specifically racial profiling, and the use of force. Designed as an answer to disparate policing, procedural justice made its public debut as part of President Obama's Task Force on 21st Century Policing in 2015 but was already a key feature of modern reformed policing.²⁶⁴ For instance, police legitimacy was a prominent feature of required reforms in Seattle in 2012.

The term police legitimacy was first used to describe effective, community-conscious, and fair policing with the advent of procedural justice.²⁶⁵ Academics, sociologists, and police reformers created procedural justice in the early 2000s as an answer to the continued failures of policing.²⁶⁶ "Creating" legitimacy meant finding meaningful ways of relating to underserved communities, particularly those in impoverished, over-

²⁶² David Kroman, "At State of the Union, Seattle Held Up as Model for Police Reform," Crosscut, January 11, 2016, <https://crosscut.com/2016/01/seattle-held-up-as-model-for-police-reform-at-sotu>.

²⁶³ United States v. City of Seattle, No. 12-CV-1282 (W.D. Wash. 2012) (settlement agreement and stipulated proposed order of resolution), https://www.seattle.gov/Documents/Departments/CommunityPoliceCommission/SPD_Consent_Decree_072712.pdf.

²⁶⁴ President's Task Force on 21st Century Policing, *Final Report; City of Seattle*, at 16.

²⁶⁵ Mark L. Timpf, "Police Reforms: Identifying the Potential Adverse Impacts and Challenges to Law Enforcement Agencies" (master's thesis, Naval Postgraduate School, 2017), 9.

²⁶⁶ Walsh, "A Practitioner's Guide to Trust and Legitimacy," 7–8.

policed areas, often communities of color in metropolitan neighborhoods.²⁶⁷ Sociological studies, specifically those of Lorraine Mazerolle, Elise Sargent, and others, demonstrated that community trust was an inherent quality of people's attitudes toward and about the police. They found that police performance is tied closely to that trust, and the exercise of accepting police authority, on the whole, has been collectively termed police legitimacy.²⁶⁸

Reformers thought that increasing engagement throughout communities while improving oversight, accountability, and transparency would improve police performance, community interaction, and citizen involvement in the criminal justice process, creating trust and, thus, improving police legitimacy.²⁶⁹ The Obama administration focused on a police reform platform, popularizing police legitimacy as a law enforcement organizational priority.²⁷⁰ In this framing, a law enforcement agency gains full legitimacy by exercising effective procedural justice.

Procedural justice is the name given to policing that resolves the long-standing separation between police and the disenfranchised communities historically targeted and abused by police.²⁷¹ In this way of thinking, trust begets legitimacy, but these concepts are often used together in this context; there cannot fully be one without the other. Sociologists in the field often differ on the distinction between trust and legitimacy as social constructs. However, they characterize them as having overlapping properties, necessarily intertwined, particularly in the policing context.²⁷² Procedural justice is an interactive process designed to partner with communities in different ways to create a theoretically trusting partnership.

²⁶⁷ "Importance of Police-Community Relationships and Resources for Further Reading," Department of Justice Community Relations Service, accessed August 7, 2020, <https://www.justice.gov/crs/file/836486/download>.

²⁶⁸ Lorraine Mazerolle et al., *Procedural Justice and Legitimacy in Policing* (Cham: Springer, 2014), 1–14, <https://doi.org/10.1007/978-3-319-04543-6>.

²⁶⁹ Jonathan Jackson and Jacinta Gau, "Carving Up Concepts? Differentiating between Trust and Legitimacy in Public Attitudes towards Legal Authority," in *Interdisciplinary Perspectives on Trust: Towards Theoretical and Methodological Integration* (New York: Springer, 2015), 3–5, https://doi.org/10.1007/978-3-319-22261-5_3.

²⁷⁰ Rushin, "Federal Enforcement of Police Reform," 3219.

²⁷¹ Worden and McLean, *Mirage of Police Reform*, 5.

²⁷² Jackson and Gau, "Carving Up Concepts?," 5–8.

The effectiveness of the partnership is proportional to the amount of trust the relationship creates.

Legitimacy in this framework acknowledges the inherent, fundamental, legal legitimacy of America's police. Under the law of the land, police have powers of arrest and legal authority to enforce the law, and are duty-bound to do so. However, social legitimacy, wherein citizens actively consent to be policed and willingly participate in the policing process, can only be granted by policed people. Procedural justice focuses almost exclusively on the sociological relationship.²⁷³

The City of Seattle has devoted six years and millions of dollars to become the model partnership between a police department and a community.²⁷⁴ It even went beyond the consent decree guidance by implementing multiple nodes it calls micro-community policing plans (MCPPs), essentially mini-neighborhood police precincts, complete with mini-taskforces and focus groups. According to systems theory, this effort should improve system resiliency, feedback response, and long-term system efficacy.²⁷⁵ Seattle has done an excellent job of creating the ability to receive diverse feedback from its system.

The city works with Seattle University to measure the effectiveness of the MCPPs over time, including metrics of citizen sentiment about the police department's performance, police legitimacy, community trust, police capacity, and crime concerns. Police legitimacy measurements fell slightly year over year from a high of approximately 62 percent city-wide, but remained relatively stable every year across the board.²⁷⁶ The surveys of Seattle's citizens from 2015 through 2019 measured a high feeling of police legitimacy.²⁷⁷ By all appearances, Seattle has been a model of reformed policing. This agency leaned into the task of building trust and legitimacy as an institutional mandate, taking every step possible to be successful, and it seemed to be working. Nevertheless,

²⁷³ Jackson and Gau, 3–5.

²⁷⁴ "Reports & Resources," Seattle Police Monitor, accessed July 31, 2020, <http://www.seattlemonitor.com/reports-resources>.

²⁷⁵ Seattle Police Department, "Micro-Community Policing Plans."

²⁷⁶ Seattle Police Department.

²⁷⁷ Seattle Police Department.

after George Floyd's death and the nationwide protests that resulted, Seattle, for all its progress, found itself not only embattled, like many other police departments across the nation, but the center of the national conversation.

B. INGREDIENTS FOR THE CAPITOL HILL ORGANIZED PROTEST

The Capitol Hill neighborhood of Seattle, Washington, was reminiscent of a post-apocalyptic film set for the next installment of Snake Plissken's franchise. The police fled, abandoning their east district precinct to angry mask-wearing mobs carrying proverbial torches. Protesters erected barricades and established borders. The Capitol Hill Autonomous Zone was born.²⁷⁸ Later renamed the Capitol Hill Organized Protest (CHOP), the event by either name was characterized by anarchy, an awakening in the media, and self-appointed armed security forces patrolling the streets.²⁷⁹ Stemming from the unrest surrounding George Floyd's death, CHOP was an unprecedented statement about the reality of the state of policing in Seattle, Washington, and the United States for the better part of a month. If it were not for violence, shootings, and murders around the area, it is unclear how long the experiment might have lasted.²⁸⁰

Given a failure of policing 1,656 miles away from Seattle caused such vehement social hemorrhaging, it would be easy to declare the consent decree-driven police reforms in Seattle a categorical failure. That label does not tell the story. In Seattle, based on sentiment in the Seattle University surveys, the fixes seemed to work. Police legitimacy measured high throughout the city, as did social cohesion, a separate metric used to determine the cooperative nature of the city's citizens and their satisfaction.²⁸¹ In fact, in the Capitol Hill neighborhood, both legitimacy and social cohesion measured high every year of the survey.

²⁷⁸ Arun Gupta, "Seattle's CHOP Went Out with Both a Bang and a Whimper," *Intercept*, July 2, 2020, <https://theintercept.com/2020/07/02/seattle-chop-zone-police/>; Katelyn Burns, "The Violent End of the Capitol Hill Organized Protest, Explained," *Vox*, July 2, 2020, <https://www.vox.com/policy-and-politics/2020/7/2/21310109/chop-chaz-cleared-violence-explained>.

²⁷⁹ Gupta, "Seattle's CHOP."

²⁸⁰ Burns, "Capitol Hill Organized Protest."

²⁸¹ "Survey Results Dashboard," Seattle Police Department, accessed November 28, 2020, <http://www.seattle.gov/police/information-and-data/mcpp-about/survey-results-dashboard>.

The people of Capitol Hill were less worried about the legitimacy of its police officers than they were about car burglars and not having enough police officers in their neighborhoods every year from 2015 to 2019.²⁸² The year-over-year trends that demonstrated success of the hard work of reform seemed to have little effect on the anger stirred by the Floyd incident in a city thousands of miles away from where it occurred. That may be true in the final analysis, but Seattle's problems are more complex than failed reforms.

First, social scientists have demonstrated that despite police brutality as a touchpoint for many race riots, the government's overall effectiveness and a national silence on social issues contribute to these outcomes more than the effectiveness of policing.²⁸³ This is important because for complex systems with complex relationships, correlation and causation are not always linked. It is also evidence of what this research has discovered: policing exists as a system within systems. It is as much a reflection of the values of society as it is its own entity. Riots are, in part, an extension of that truth.

Second, Seattle is a stronghold of liberal politics, and social progressivism dominated the local elections in 2019.²⁸⁴ Seattle's history lends itself to protesting, and some suggest that it is part of the community's identity. Seattle was active in the Occupy movement, and the Capitol Hill area is widely known as one of the prominent counterculture areas in a city known for its counterculture. Its City Council representative, Kshama Sawant, openly supported the CHOP experiment, and Seattle Mayor Jenny Durkan celebrated its counterculture reputation to reporters during a press conference amid the crisis.²⁸⁵ In a city whose identity is to protest, led by leaders who celebrate the act, in a neighborhood that celebrates radicalism, with a history of Occupy-style protests, it seems CHOP may have been inevitable at some point, regardless of the cause.

²⁸² Seattle Police Department.

²⁸³ Worden and McLean, *Mirage of Police Reform*, 56–57.

²⁸⁴ Christopher F. Rufo, "Seattle's Course: Harder Left," *City Journal*, November 14, 2019, <https://www.city-journal.org/seattle-progressive-city-council-amazon>.

²⁸⁵ Hallie Golden, "Seattle's Activist-Occupied Zone Is Just the Latest in a Long History of Movements and Protests," *Guardian*, June 21, 2020, <https://www.theguardian.com/us-news/2020/jun/21/seattle-activist-occupied-zone-chop-long-history-movements-protests>.

Last, police legitimacy is framed by the idea that people are more willing to be policed or interact with and rely on the police if they have a sense of trust in the police's ability to be fair and impartial. The idea of trust in this sense is relative. Jackson and Gau call it the "subjective probability of value behavior," based on the individual and collective sense of the holder.²⁸⁶ Trust is the product of one party's meeting another's subjective expectations of behavior, and any value given to that effort depends entirely on the feelings of those whose trust is sought.²⁸⁷ The overlapping dimension in the relationship between legitimacy, in this sense, and trust is problematic. It essentially forces police to meet expectations or satisfy the trustor to retain legitimacy.

On the one hand, police have a duty to protect lives and property while maintaining law and order—and most agree with this premise. On the other hand, when satisfaction about how, when, where, and why that happens bears so much weight in the conduct of policing, the juxtaposition is unmistakable. The police's performance in their duties does not factor fairly into how they are perceived. Legitimacy in this frame does not speak to police performance but to how people think about the police.²⁸⁸ Therein lies the problem with pursuing legitimacy as a goal. The act and idea of policing are often at odds with the sentiment about policing. It is possible for appropriate police actions to be unpopular or perceived negatively by some, or even many people.

There is another problem with the outgrowth of sentiment-based legitimacy in Seattle, particularly in its multiple systems. Modern reforms and their outgrowths may erode institutional legitimacy. CHOP does not represent all of Seattle's citizens; it is a small community representing four blocks of the city, a fraction of the city's nearly 750,000 people, not its whole.²⁸⁹ The CHOP incident and its desertion by police are unlikely to positively affect sentiment about the policing institution's reliability in Seattle,

²⁸⁶ Jackson and Gau, "Carving Up Concepts?," 5.

²⁸⁷ Jackson and Gau, 5.

²⁸⁸ Worden and McLean, *Mirage of Police Reform*, 50–51.

²⁸⁹ Burns, "Capitol Hill Organized Protest." Most coverage has estimated the number of protesters occupying the CHOP as "thousands" with a fluctuating population; the final count remains unknown.

Washington, when crisis strikes. Research suggests that the reform-based pursuit of legitimacy is doomed from the start.

Worden and McLean predicted much of what has come to pass in cities like Seattle in their book *Mirage of Police Reform*. They conducted a study of six cities using the procedural justice model and concluded that police legitimacy through procedural justice is mostly a fallacy.²⁹⁰ Their study demonstrates that this mirage of police reform is simply a repackaging of community-policing ideas that have had little effect on policing's legitimacy in communities where the police are already perceived as corrupt. They argue that people develop sentiments about police at a young age, so trust-building mechanisms have little effect—because social relationships and personal experiences have already reinforced their distrust of the police. Worden and McLean's findings demonstrate contextual relationships that seemingly render futile the pursuit of sentiment-based legitimacy. Simply stated, procedural justice-created legitimacy is the wrong goal for policing to pursue for its system, in either the micro or macro context.²⁹¹ This does not mean legitimacy is an invalid aim altogether, but as the primary focus driving police operations at the administrative level, it can cause problems.

C. THE CONTEXT OF PROBLEMS AND THE PROBLEM WITH CONTEXT

The sociological and political conditions that contributed to the nation's most unique George Floyd protest are specific to Seattle. These conditions contribute to the system's context, the environment in which the system operates. It is the space in which unique overlapping system relationships create unique system responses. Context matters to all systems, but it creates special challenges like politics, reputation, socioeconomic history, expectations, and emotional responses in human systems. All of these create contextual nuances in which a system must operate. Portland, Oregon, with social and political conditions similar to Seattle, Washington, struggled in the aftermath of the Floyd protests. However, the nuanced contexts of Portland's issues, no matter how damaging, are

²⁹⁰ Worden and McLean, *Mirage of Police Reform*, 189.

²⁹¹ Worden and McLean, 189–93.

not those of Seattle, nor are they those of Albuquerque, New Mexico, another city where Floyd-related protests went on for months. They are microsystem contexts whereas generalized sociological discord as a touchstone of rioting is a macrosystem context, meaning it is not geographically or locally bounded. It is near universal in all human systems in the United States.

As discussed in Chapter III, America's police organizations are human systems. As human systems, they too have different environments that affect the performances of their systems. Broadly, in a macrosystem context, policing is both a political and institutional construct. Granularly, police organizations exist in individual states, counties, cities, jurisdictions, and precincts. These are its microsystems. They are communities, vacuums of history, sociology, geography, race, and economic vectors, each unlike the next. Like in Seattle, they interact with many other systems with their contexts and create unique policing environments. Some issues exist persistently in the macrosystem of generalized policing, such as police brutality, racial profiling, and corruption. For such issues as systemic racism or poverty in the overall macrosystem of American experience, they exist more like ideas than they do reality. However, in microsystems, where corruption and poverty are authentic, tangible environments in which people live and work, they are palpable realities. Figure 3 depicts the contextual relationships of policing as they exist inside one another, all of them nested within the overarching institution of society.

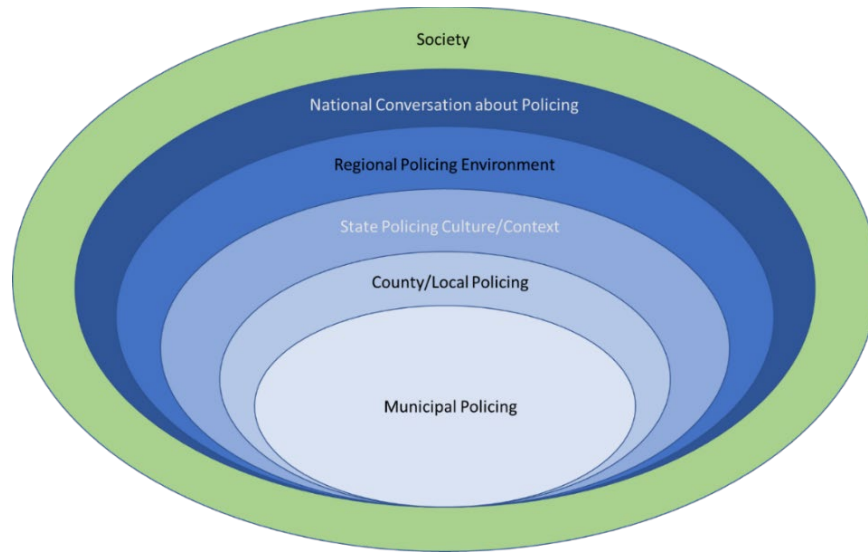


Figure 3. Contextual Relationships of Policing

It is essential to understand the dichotomy between the relationships in microsystems and macrosystems because each microsystem can meaningfully affect the others. However, thinking of them in terms of size and leverage helps to explain, albeit not entirely, the subtleties of the space between them and how volatile it might be.²⁹² It makes minute yet potentially explosive events—such as George Floyd’s death, broadcast on every screen in America for weeks on end—impossible to reconcile in the microsystems of American police departments like Seattle, where reforms are featured prominently. However, they are held to account because all police systems exist together in the macrosystem. The opposite, of course, is true as well. Microsystem events can alter the macrosystem. In the aftermath of the Floyd incident, police agencies across the United States banned chokeholds, not because the tactics used in Minneapolis featured a chokehold but because in the macrosystem, which includes the politics and sentiments

²⁹² Nirav B. Shah, Donna H. Rhodes, and Daniel E. Hastings, “Systems of Systems and Emergent System Context,” Paper #85 (Cambridge: Massachusetts Institute of Technology, 2007), 3, https://www.researchgate.net/publication/255527299_Systems_of_Systems_and_Emergent_System_Context; Anind K. Dey, “Understanding and Using Context,” *Personal and Ubiquitous Computing* 5, no. 1 (2001): 3, <https://doi.org/10.1007/s007790170019>.

about policing, “banning chokeholds became part of the effort to reassure stressed communities.”²⁹³

Understanding the dichotomy of context helps reconcile how, in 2017, public satisfaction with the police in the United States, as captured by a Gallup poll, was at 57 percent. Its lowest was at 52 percent in 2015. The poll seems to demonstrate that the majority of Americans were satisfied with the police.²⁹⁴ A separate survey conducted by the American Civil Liberties Union found that 91 percent of Americans in 2017, the same year as the Gallup poll, believed policing in America required significant reforms.²⁹⁵ Somehow, in the national conversation about policing, there coexists police satisfaction and an overwhelming need to reform.

In these coexisting environments that comprise policing in America, the idea that people could agree about how to—or even the functional ability to—obtain trust and legitimacy, particularly as a relative sentiment-based idea, is difficult to conceive. Complexity promises that in every complex system, accidents, or normal accidents, and anomalies occur.²⁹⁶ A coexisting microsystem–macrosystem legitimacy that depends on trust in a complex system that will eventually, and certainly, prove its unpredictability will continue to fail both systems, as it has in the past. Thus, neither system can acquire legitimacy entirely or independently. The entire understanding of what makes meaningful police legitimacy is built exclusively on a relativist sociological frame that does not account for the systemic dichotomy in application contexts. As addressed previously in the Worden and McLean study, even sociologists disagree on the merits of trying to create police legitimacy in America.²⁹⁷

²⁹³ Kimberly Kindy, Kevin Schaul, and Ted Mellnick, “Half of the Nation’s Largest Police Departments Have Banned or Limited Neck Restraints since June,” *Washington Post*, September 6, 2020, <https://www.washingtonpost.com/graphics/2020/national/police-use-of-force-chokehold-carotid-ban/>.

²⁹⁴ Jim Norman, “Confidence in Police Back at Historical Average,” Gallup, July 10, 2017, <https://news.gallup.com/poll/213869/confidence-police-back-historical-average.aspx>.

²⁹⁵ “91 Percent of Americans Support Criminal Justice Reform, ACLU Polling Finds,” American Civil Liberties Union, November 16, 2017, <https://www.aclu.org/press-releases/91-percent-americans-support-criminal-justice-reform-aclu-polling-finds>.

²⁹⁶ Shrivastava, Sonpar, and Pazzaglia, “Normal Accident Theory.”

²⁹⁷ Jackson and Gau, “Carving Up Concepts?,” 2.

Moreover, there appears to be another flaw, or indeed a warning, in the frame of police legitimacy found in Seattle's sociological application. While acknowledging the legal legitimacy inherent in policing, the concept fails to acknowledge the institution's need to retain its foundational legitimacy throughout. When police flee their responsibilities for whatever reason and leave order discarded, by definition, there can be no institutional legitimacy, regardless of the sentiments about it.²⁹⁸ In that time and place, the police cease to exist for all intents and purposes. An exciting topic of research for future consideration, beyond the scope of this thesis, might be to study the potential for erosion of institutional legitimacy in the procedural justice movement.

D. SEATTLE AS A CAUTIONARY TALE

The SPD's struggle with modern reforms, framed by a national conversation about policing in crisis, through the lens of its own local and political microsystem environment, demonstrates how conflicted contexts can cause problems not only in reforming police departments or setting their goals but also in affirming their existence. The SPD's consent decree monitor, Merrick Bobb, the chosen observer and manager of the mandated police reform process, quit in the aftermath of the protests. In his resignation letter, Bobb said, "The SPD is at its nadir."²⁹⁹ Using the word nadir, meaning "lowest point," was the essence of Bobb's criticism. He reported that the SPD needed better leadership and criticized the tactics of the department and resistance from police unions in undermining the reform process. Bobb felt the City Council's meddling and pledge to defund the SPD by 50 percent were overreaching and unnecessary.³⁰⁰

Countering Bobb's criticisms, retired Seattle Mayor Mike McGinn argued, "If it's a nadir like said Merrick Bobb, he's the one who built the luge run to it."³⁰¹ McGinn

²⁹⁸ Gupta, "Seattle's CHOP."

²⁹⁹ Mike Carter, "Seattle Police Monitor Resigns, Says Use of Force during Protests Has Cost Goodwill," *Seattle Times*, September 8, 2020, <https://www.seattletimes.com/seattle-news/federal-judge-appoints-new-monitor-for-seattle-police-harvard-professor-replaces-merrick-bobb-who-resigned/>.

³⁰⁰ Doug Trumm, "Court Monitor Bobb Helped Create Seattle's Police Reform Mess," *Urbanist*, September 14, 2020, <https://www.theurbanist.org/2020/09/14/court-monitor-bobb-helped-create-seattles-police-reform-mess/>.

³⁰¹ Trumm.

argued that during the protests, the department's officers had been following escalation and use-of-force policies that had been overseen by Bobb. He argued that Bobb was the only consistent force of leadership in the department in the eight years he oversaw the consent decree. All of the department's failures in that time were as much Bobb's as anyone's. McGinn said, "Since he was appointed, we have had five different mayors, the City Council's nine members have completely turned over, and there have been seven police chiefs. And police reform is not succeeding."³⁰²

In the aftermath of CHOP, Seattle slashed its police department's budget by 20 percent, a fraction of the originally proposed 50 percent.³⁰³ Regardless, Seattle's city leadership cut command staff salaries in June 2020, prompting the resignation of its chief, Carmen Best, one of only seven black female police chiefs in America's 100 largest cities.³⁰⁴ The department has been losing officers at historical rates as well. Meanwhile, its new consent decree monitor, Dr. Antonio Oftelie, a Harvard academic, praised the department as one of the country's most progressive but promised to focus on more progressive reforms focusing on accountability, transparency, and oversight.³⁰⁵

Seattle's government's goals are not aligned with those of its citizens or with its consent decree. As stated previously, the citizens, surveyed every year for the past five years, provided feedback on what they cared about when it came to policing. Every year of the survey, the top two concerns of Seattle's people were "car prowls" and a "lack of police capacity."³⁰⁶ In a city where mandated reforms have focused on procedural justice agendas and sentiment-based legitimacy, the political framing of its goals all but guarantees that its citizens' concerns will not be addressed and sentiments about police will further

³⁰² Trumm.

³⁰³ Andy Rose and Hollie Silverman, "Seattle's Mayor Is Set to Sign a New City Budget Cutting the Police Department's Funding by 18%," CNN, November 25, 2020, <https://www.cnn.com/2020/11/25/us/seattle-police-budget-cut/index.html>.

³⁰⁴ Taylor Mirfendereski et al., "Female Police Chiefs Rare in Nation's Largest Cities," NBC Seattle, July 17, 2018, <https://www.king5.com/article/news/local/female-police-chiefs-rare-in-nations-largest-cities/281-574941123>.

³⁰⁵ Carter, "Seattle Police Monitor Resigns."

³⁰⁶ Seattle Police Department, "Survey Results Dashboard."

erode. It may already be evident. Satisfaction in Seattle’s police has fallen from 62.9 percent in 2016 to 54.4 percent in 2019.³⁰⁷

E. SETTING THE WRONG GOAL

Donella Meadows identified a series of system archetypes she calls system traps that can prevent optimal operation.³⁰⁸ She would likely argue, based on the Seattle example, that modern reformed policing’s attempts to “create” legitimacy or achieve incongruent politically motivated goals, as in Seattle, fit the system archetype of “seeking the wrong goal.”³⁰⁹ Meadows argues that setting the correct goals is vital because goal-setting is the most powerful way to influence a system.³¹⁰ The pursuit of the wrong goal will assure results congruent with that wrong goal—creating wrong, incomplete, or undesirable results. System managers often confuse the effort of reaching wrong-headed goals with ideal resultant outputs. As a result, systems break down because of strict adherence to rules or processes that lead them to their goals.³¹¹ In many ways, Seattle exemplifies this idea. Reforms that pressure the systems to achieve their goals of creating legitimacy and counterproductive political agendas combine to confound policing’s actual act, creating a crisis of institutional legitimacy in the process. These conflicting goals create an environment where the focus on process surpasses the desired end state: fair but effective policing with conflicted contextual influences. It is arguable that the focus on trust-building and legitimacy obscures the desired output and fails to create either in the process. Senge warns of precisely this problem in the *Fifth Discipline*, arguing that this phenomenon creates limits to the system’s ability to grow and limits its operators’ ability to adjust it. In other words, a self-limiting system cannot learn about itself.³¹²

³⁰⁷ Seattle Police Department.

³⁰⁸ Meadows, *Thinking in Systems*, 111.

³⁰⁹ Meadows, 138.

³¹⁰ Meadows, 138.

³¹¹ Meadows, 140.

³¹² Senge, *The Fifth Discipline*, 167, 212.

Despite the problems that system traps create, Meadows is enthusiastic about their discovery. She argues that the discovery of a system trap represents not only the recognition of a failure of performance but an opportunity for system improvement. She suggests there is power in understanding a system's manipulability and recognizing archetypes, and applying systems thinking is a powerful tool for changing a system's course.³¹³ The most vital aspect of systemic influence is understanding a system's ideal state and the actions needed to achieve it. This process infers a desired objective understanding of both the ideal and current state as well as the desire and ability to change the system.³¹⁴ Senge, too, argues that system archetypes are bilateral mechanisms. In other words, they demonstrate how systems can fail and how leveraging the correct mechanisms can correct and improve them.³¹⁵

F. A WAY FORWARD

David Bayley, Michael Davis, and Ronald Davis argue for a dichotomous relationship between strategic goals of policing and technical applications in a 2015 paper for the Harvard Kennedy School in partnership with the National Institute of Justice.³¹⁶ They argue that policing needs to learn to divest itself from sociological problems while learning to function within society, performing intentionally and equitably for all concerned.

Bayley, Davis, and Davis essentially acknowledge policing's existence in multiple systems and divide it into macro and microsystem contexts. They advocate police having a "strategic voice" about policing and on behalf of the disenfranchised while maintaining "tactical agency," that is, inherent institutional legitimacy. For police to make a relevant difference in a series of complex systems and contexts, they must discover how to engage meaningfully within their role in the daily reality of policing while also divesting from

³¹³ Meadows, *Thinking in Systems*, 112, 146–47.

³¹⁴ Meadows, 138–41.

³¹⁵ Senge, *The Fifth Discipline*, 93.

³¹⁶ David H. Bayley, Michael A. Davis, and Ronald L. Davis, "Race and Policing: An Agenda for Action," in *New Perspectives in Policing* (Washington, DC: National Institute of Justice, 2015), 15, <https://www.ncjrs.gov/pdffiles1/nij/248624.pdf>.

problems that they cannot solve. Institutional racism, systemic poverty, and social inequity are not problems America's police are equipped to solve. However, they should be prepared to address them openly within the discourse of American society.³¹⁷

The combined strategic voice and tactical agency approach extolls the virtues of idealized ethical policing. As the Law Enforcement Code of Ethics' first stanza reads,

As a law enforcement officer, my fundamental duty is to serve the community; to safeguard lives and property; to protect the innocent against deception, the weak against oppression or intimidation and the peaceful against violence or disorder; and to respect the constitutional rights of all to liberty, equality, and justice.³¹⁸

Adopting this approach may help police organizations navigate the contextual and system dichotomies that create conflicting goals and limit their effectiveness. There may be a significant power in building a new way of thinking about the role of American policing as a virtuous ideal bounded to all its systems in the macro and microsystem contexts regardless of context or system space. Doing so could have a focusing effect on both the macro and microsystems that make up policing in America.

Notably, perhaps most importantly, a philosophical macrosystem goal that guides policing's role in its strategic voice and tactical agency in the macrosystem of American policing translates as a practice to the microsystem context—the act of policing, as well. This is important because it gives police organizations the power and duty to use their voices to combat the noise of dynamic and unique context, whatever the source, while matching their agencies to citizens' needs. A virtue-ethics national policing ideal that is simple for the public and police to understand, equitable for all, defensible in all contexts, and applicable in all police systems creates a unified philosophical exemplar against which to measure all police performance, leadership, and political priorities. The goal frames the ideal state and allows the macrosystem and microsystems to function in context to achieve the same goal. From a systems perspective, systems with clear goals, a known ideal system

³¹⁷ Bayley, Davis, and Davis, 2–8, 10–12.

³¹⁸ "Law Enforcement Code of Ethics," International Association of Chiefs of Police, accessed August 8, 2020, <https://www.theiacp.org/resources/law-enforcement-code-of-ethics>.

state, relevant feedback, and competent practitioners who understand both the goals and the system are highly functioning systems.

Consider whether, under the macro idea of policing, the United States defined the ideal state of policing as something like the following: Any innocent person can expect to be able to live and work in their community regardless of age vulnerably, race, orientation, or social or economic status and feel safe from crime and persecution.³¹⁹ A fixed, concerted ethical ideal might begin to create the framework against which to measure America's police against an unbiased, neutral, consistent, legal, and ethical standard in both the macro and microsystems it occupies. One could argue that all policing that meets the standard would be as legitimate as the standard to which it is held, thereby achieving legitimacy. Instead of a sentiment-based legitimacy, subject to a high degree of volatility, where failure is all but guaranteed, a new way of thinking might clear the path to reframe the way people think about what constitutes police legitimacy.³²⁰ Full or absolute legitimacy—which encompasses the legal authority granted to policing, the institution's reliability to perform its essential functions, and the trust to do so equitably, effectively, and consistently—is possible when the standards by which policing gets judged become fixed for all police agencies.

Rather than an effort to create legitimacy by gaining trust, this framing allows legitimacy to grow organically, over time. Full legitimacy takes shape, framed in the macrosystem ideal, translated by reality, into police officers' day-to-day practices within their contextual microsystem environments. Each experience would be potentially as unique in its discovery as the next. In this way, legitimacy is an emergent property of optimally functioning microsystem environments.³²¹

³¹⁹ "Innocent" as used here is defined as "free from legal guilt or fault" and "harmless in effect or intention." It is intended to capture that criminal accountability still exists in this framework but only in the applicability of individual acts of criminal activity, regardless of general or specific intent.

³²⁰ Worden and McLean, *Mirage of Police Reform*, 186–89.

³²¹ "Concepts: Emergence," New England Complex Systems Institute, accessed August 8, 2020, <https://necsi.edu/emergence>.

While, at first, this proposition seems to be a departure from the concept of procedural justice and police legitimacy, it is not. It combines liberty and the uniqueness of policing environments by creating a social precept about policing and an absolute standard to which America's police, without exception, are to be held. It asserts the need for the police's virtue to transcend inequality by treating all people the same within that framework. This concept gives America's police a voice and a responsibility in helping to right society's wrongs. It does not deny the history policing has in creating or perpetuating some of them. Instead, it acknowledges the role policing can play in addressing them and a different kind of ownership over its system and problem spaces. It creates a moral identity for policing to adhere to and be accountable for its benefit and societal expectations about policing.

G. CONCLUSION

Changing the goal to this fixed standard of policing could begin to shift Americans' thinking about policing, including changes in its scope and mission. In the wake of the Floyd incident, America's conversation about police focused on how to make policing better, how to re-think its applications in our society.³²² Adopting goals that exemplify the ideal state's virtues creates a template against which to weigh police responsibilities, strategies, and tactics. Legislation regulating policing, policing executive management, policies, and procedures should begin to reflect the ideal.

Setting a standard for policing to follow allows it to use its strategic voice to better manage the contextual encroachments that cause it problems. It also provides the opportunity to partner with those who align with that view, for whatever reason, to challenge the sociological and political problems that inhibit the system's ability to be equitable and effective. Whether it includes some unbundling of police services or even defunding, society may need new solutions and new non-policing systems to manage them, and America's police could be the leaders in those tough conversations. The application of

³²² Rashawn Ray, "What Does 'Defund the Police' Mean and Does It Have Merit?," *Brookings* (blog), June 19, 2020, <https://www.brookings.edu/blog/fixgov/2020/06/19/what-does-defund-the-police-mean-and-does-it-have-merit/>.

this virtuous policing philosophy also means police will have to learn to evaluate how or whether to enforce laws and statutes that do not fall within the ideal framework. Police will have to learn how to use their voices to socially and publicly support those whose civil rights within that ideal are threatened.

In some ways, policing could become the apolitical and ethical center of the United States by operating exclusively within their institutional mandate and bolstering their stockpiled legitimacy in doing so. Police possess the ability to enforce with discretion the spirit of the law rather than the letter of it in nearly all statutory constructs. The purpose of this power could be to inform upon and affect sociological change by using it judiciously, constantly comparing itself and its actions against the desired state to affect meaningful policing outcomes. This change in thinking allows the system to become reflexive, giving it the power to adjust the micro and macrosystems based on society's subtly changing ideals of virtue.³²³

Detractors from this shift in framing the system's desired output and goals might argue that a shift away from attaining trust and legitimacy with segments of society, particularly poor communities and communities of color, is a divestment of purpose. They might argue that there is no special provision in this way of thinking about the system's goals that accounts for the discrepancy in how it addresses race and related issues. That is true. Instead, in this way of thinking, the system's goal accounts for everyone, regardless of how society finds them divided.

As systems, police organizations, much like Seattle, will always struggle to perform optimally until, from systems framing, they understand the many contexts with which they contend. Policing needs to find better ways to relate to people at the outer reaches of idealized policing. Policing as a system's ability to meaningfully couple with communities of color within cities, neighborhoods, sects, and tribes was always and remains a struggle. Reframing the system's goals around an absolute ideal creates a moral center for America's

³²³ It is important to distinguish between the terms "reflexive" and "reflective" as they are used in this thesis. They are not interchangeable. *Reflexivity* is the quality of self-assessing, evaluating, and changing or considering change based on that assessment. There is a quality of reflection in reflexivity. *Reflection*, on the other hand, is a process or quality of thinking deeply, evaluating, developing insight, and modeling future outcomes based on learned experiences.

police as both macro and microsystems. Police can begin to understand how to better couple with society as a system and improve its interactions.

Enthusiastically, Meadows explains how systems are poised to pivot and describes a new goal's power. She argues that these changes occur at leverage points that seem counterintuitive and that new system goals in established systems have the power to enact dramatic change in system performance.³²⁴ The current age appears to be such an opportunity.

The next chapter considers coupling and its importance to policing. It evaluates how police systems obtain feedback and why feedback is imperative to long-term resiliency. Finally, it discusses a possible way forward for police systems to perpetuate strong, reliable, and meaningful feedback to improve the resiliency of America's police.

³²⁴ Meadows, *Thinking in Systems*, 162.

VI. SEEKING FEEDBACK AND FINDING RESILIENCE

In most meaningful ways, policing fails to create harmonious relationships with many of the people it serves. It is a well-cataloged historical failure of policing as well and one that many reforms attempt to address. Failing to connect with people in real concrete and continuous ways compromises police systems' resiliency, particularly the resiliency of relationships between the police and people. The lack of consistent, reliable, and relevant feedback from external sources may share some responsibility for the historical failures of policing in the United States.³²⁵

Better coupling with systems of people, such as communities and social groups, to assimilate them as part of the law enforcement process can transform the behavior of policing as a complex system and the systems with which it interacts. Improved system coupling creates broad pathways to improve feedback. Even better, more reliable feedback builds relationships, trust, and, most important, shared responsibility, which lead to a social resiliency traditional reforms fail to deliver. To put it simply, connecting with people in meaningful, lasting dialogue and creating partnerships with communication pathways outside the police organization's internal systems may help police organizations better understand how to serve people and help society better understand its police. Quality, lasting relationships between people and their police may lead to less volatility in policing outcomes.

This chapter reviews, in part, how policing struggles to engage with people. It demonstrates why, from a systems perspective, coupling with other systems and feedback is imperative for future success. Finally, it suggests potential solutions to improve coupling, expanding systems' boundaries and system feedback, ultimately improving the resiliency of the relationships between police organizations and the people they serve.

³²⁵ Walker and Archbold, *The New World of Police Accountability*, 35–36, 268, 271; Worden and McLean, *Mirage of Police Reform*, 23–24.

A. WHY COUPLING IS TOUGH

Coupling is the idea of connecting two things. In systems, coupling has two meanings. As in plumbing, the first connects various system parts, like pipes, to improve or expand the system.³²⁶ The more coupled parts there are, particularly if there are interdependent connections, the more complexity exists. The dual-system meaning of coupling connects multiple systems, like a house's plumbing connecting to a city water system. Space where the systems connect is called a boundary. In the plumbing example, a boundary might be the space between a water main and a home. Complexity is greatest where boundaries meet.³²⁷

The complexity that occurs at the system boundaries is one of three reasons policing struggles to relate to people. The second reason is that the inherent act of policing betrays people's expectations and makes trust a problematic proposition. The last reason police struggle to connect to people is bounded rationality, limiting how police systems see the world and make decisions about themselves. Each of these reasons has some overlapping effect on the others, which is the nature of complexity.

B. THE TRUST GAP

As explained in Chapter V, police departments are subject to many environmental influences that affect how they perform. The same is true in the concept of coupling. Police organizations couple to the area or region they police generally, meaning in a geographical sense, they are responsible for a jurisdiction. Within that jurisdiction, there are different communities, neighborhoods, regions, sects, cultural centers, and ethnicities. For instance, New York City comprises five boroughs, 59 distinct community districts, and hundreds of different neighborhoods.³²⁸ Some estimate there are over 800 different languages spoken in New York.³²⁹ Coupling between New York's police and its citizens occurs in each of

³²⁶ Meadows, *Thinking in Systems*, 13–18.

³²⁷ Meadows, 95–99.

³²⁸ “New York City: A City of Neighborhoods,” New York City Department of City Planning, accessed December 13, 2020, <https://www1.nyc.gov/site/planning/data-maps/city-neighborhoods.page>.

³²⁹ “The Diverse Languages and Nationalities in New York,” On the Dot Translations, accessed December 13, 2020, <https://onthedottranslations.com/new-york-diversity/>.

these different environments by virtue of the systems interacting on some level every day. Each community, neighborhood, sect, or ethnicity exists in its own context with its own history and expectations of how policing does and should perform.

Social scientists commonly account for the way people and the police relate to one another through the procedural justice doctrine, which frames these relationships in the concept of trust. While there is no academic agreement on the meaning of the word trust, the most consistently used definitions capture the idea that one can expect a specific outcome when something happens. The actual outcome largely confirms that expectation.³³⁰ When people do not deliver on expectations, the distance between expectation and outcome is a “trust gap.” Over time, the failure to meet expectations increases that gap.

For a police organization, trust gaps are more complex because effective policing is a subjective measurement to different stakeholders, and the objective role of police in society is poorly defined in the modern context. Interestingly, attitudes about police performance, particularly in communities generally distrusting of police, are less tied to crime-fighting performance than the perception of satisfaction in the police. Additionally, research shows the “global attitudes” of urban, mostly black and Hispanic survey respondents remain less trusting of police than of white respondents of all categories, despite reform efforts. The research similarly ties those respondents to more negative feelings about government in general and to more involuntary police contacts. Last, historical over-policing, racial profiling, and inconsistent (or perceived) unfair policing tactics amplify reactions and negative expectations with black respondents.³³¹

Jill Leovy’s book *Ghettoside* demonstrates how historically lousy race relations in inner-city Los Angeles set the stage for the existing culture of distrust in Los Angeles’ police departments that has remained for generations. This affects the Los Angeles Police Department’s ability to solve murders due to citizens’ inherent mistrust of the police in

³³⁰ Jackson and Gau, “Carving Up Concepts?,” 3–5; John Field, *Social Capital* (New York: Routledge, 2003); Stephen R. Covey and Rebecca R. Merrill, *The Speed of Trust: The One Thing That Changes Everything* (New York: Free Press, 2018).

³³¹ Worden and McLean, *Mirage of Police Reform*, 44–48.

those communities.³³² Leovy's example exemplifies the research that modern police performance remains hampered by global attitudes about the police in communities where trust gaps exist.

C. BOUNDED RATIONALITY

Boundaries are constructs people create to understand systems better. Boundaries help define the different system spaces and create understandable bite-size systems, a way of grasping complexity.³³³ System boundaries are mainly about perspective because they help people understand the parts of systems and how they begin to fit together, but with a limited perspective, they can also confuse problem-solving in systems. For example, thinking about failures or undesirable outcomes in complex adaptive systems by considering only some of the available information can become problematic.³³⁴ Senge likens this problem to three blind men grabbing different parts of an elephant and each declaring to understand the elephant fully, thus demonstrating how understanding parts of a system can provide some but never all of the information needed to understand the system as a whole.³³⁵

Bounded rationality, in a sense, limits systems to their environments. The system's function ties directly to its feedback, but system operators make decisions about the system from a limited portion of the potential feedback when bounded rationality is present. It does not have access to or ignores some available, often veiled, distant, or unmeasured information about the system. Often disastrous consequences occur when decisions about the system consider only limited data or fail to acknowledge that all systems suffer from imperfect information.³³⁶ In Senge's elephant metaphor, imagine the blind elephant handlers' deciding to feed the creature on the information provided solely by the back

³³² Jill Leovy, *Ghettoside: A True Story of Murder in America* (New York: Spiegel & Grau, 2015), 39–41.

³³³ Senge, *The Fifth Discipline*, 69.

³³⁴ Senge, 66–67.

³³⁵ Senge, 66.

³³⁶ Meadows, *Thinking in Systems*, 106–8.

third's handler. Good-faith and relatively rational decisions made without all available information do not achieve the desired results. Even in the best-case scenario, as complications go, they result in a rather irate and still hungry elephant.

The police reform industry's implementing expensive reform programs under federal consent decrees without measuring their outcomes effectively or consistently is an example of bounded rationality with costly outcomes.³³⁷ The situation in Seattle, Washington, described in Chapter V, is a notable example of bounded rationality with real consequences. Decision-makers and reformers often treat law enforcement as a closed system because they desire to keep it highly reliable.³³⁸ It interacts with other systems, but it is independent of them, and decisions made about its performance are measured internally. By measuring internal processes about external outputs, law enforcement has been blindly making decisions about its systems' effectiveness without accounting for output, consumers, or all available feedback for at least the better part of 40 years.³³⁹

Bounded rationality can cause many problems, including alienating external feedback mechanisms, such as communities, social groups, and individual people. Many policing failures result from failing to understand the external environments, read feedback correctly, or adjust to it accordingly. Theodore Roosevelt's tenure as police commissioner of New York City is an excellent example of how bounded rationality creates problems between the police and the policed people.

Theodore Roosevelt was instated on the New York City Police Commission by Mayor William Strong in 1895 in response to widespread corruption and embraced by the press as an "able reformer."³⁴⁰ Roosevelt's politics were "socially progressive," and in the

³³⁷ Katie Benner, "Sessions, in Last-Minute Act, Sharply Limits Use of Consent Decrees to Curb Police Abuses," *New York Times*, November 8, 2018, <https://www.nytimes.com/2018/11/08/us/politics/sessions-limits-consent-decrees.html>.

³³⁸ Schneider and Somers, "Organizations as Complex Adaptive Systems," 355.

³³⁹ Benner, "Sessions, in Last-Minute Act, Sharply Limits Use of Consent Decrees."

³⁴⁰ Theodore Roosevelt, "Municipal Administration: The New York Police Force," *Atlantic*, September 1, 1897, <https://www.theatlantic.com/magazine/archive/1897/09/municipal-administration-the-new-york-police-force/519849/>.

same spirit he did with police corruption, Roosevelt attacked moral corruption.³⁴¹ He aggressively enforced morality statutes, those that closed brothels, gambling halls, and drinking houses. The working class and poor who were some of Roosevelt's ardent supporters in implementing police professionalization reforms found themselves disproportionately targeted by the police and disenchanted with progressive reform.³⁴² Roosevelt's popularity among the poor and immigrants, whose livelihood and social relationships his social programs most affected, fell dramatically. Ultimately, the unpopularity of Roosevelt's desire to stamp out "vice" crimes was his political undoing in New York City, and his rivals, supported by the promise to end the unwanted programs, ousted him.³⁴³

Roosevelt's enforcement of "morality statutes" and the results foreshadowed the next 120 years of policing. Notably, it may be the first instance of organized policing disproportionately targeting its poor, ethnic citizens. It certainly exemplifies the problem with the idea that politically or legislatively motivated ideations to dictate how communities get policed without regard for its effects on those communities. Invariably, legislative zero-tolerance law enforcement practices affect the poor and minorities more than the social elite.³⁴⁴

The Roosevelt NYPD was a demonstration of how bounded rationality by or about policing in the modern era can often be at odds while serving the duty of its offices with communities. It demonstrates a social system tension between the desires of "social order" and the stark realities enforcement creates in communities. Drug crime, gang crime, violence, and property crime occur most frequently in poor communities.³⁴⁵ The more

³⁴¹ Berman, *Police Administration and Progressive Reform*, 6–7.

³⁴² Berman, 118.

³⁴³ Berman, 120.

³⁴⁴ "Zero Tolerance and Aggressive Policing (and Why to Avoid It) in Depth," RAND Corporation, accessed September 13, 2020, <https://www.rand.org/pubs/tools/TL261/better-policing-toolkit/all-strategies/zero-tolerance/in-depth.html>.

³⁴⁵ Benjamin H. Harris and Melissa S. Kearney, "The Unequal Burden of Crime and Incarceration on America's Poor," *Brookings* (blog), April 28, 2014, <https://www.brookings.edu/blog/up-front/2014/04/28/the-unequal-burden-of-crime-and-incarceration-on-americas-poor/>.

efficient policing is at enforcing the law, the more it affects those communities and their people. There is conflict in the space between the mandate of its office and the damage that mandate can cause. Most important, the decision-making processes that drive law enforcement from within police organizations and without do not account for available feedback about the system's performance. As a result of this bounded rationality, the trust gap that creates difficulty for police in coupling with communities is as much a societal problem as it is a policing problem.

Recent history is fraught with examples of technical law violations and horrible outcomes for police and people of color, thus widening the trust gap. The names are known in every American household: Eric Garner, Michael Brown, George Floyd, and Sandra Bland, to name a few. Each of these people was a black American. All are dead at the hands of police, except for Sandra Bland, who committed suicide after her arrest. All were unarmed and died while resisting arrest, except Bland. Each of them committed a technical violation of the law at the time of his or her arrest. Each of them refused to cooperate with the police—and in the case of Brown, violently, by any definition, resisted arrest. The police officers were doing their jobs and making sense of their training and the legal mandate dictating their professional responsibilities, and in most cases, they were sworn by oath to uphold the law of the land. In each case, their duty involved engaging suspects based on a technical violation of the law that did not directly affect the life, liberty, or safety of any other person who precipitated the incident.³⁴⁶

In Bland's case, the officer issued a citation for violating a traffic law, a violation the officer had caused. It was not safety related in the real sense of the word.³⁴⁷ Officers attempted to arrest Garner for illegally selling individual cigarettes, as New York State taxes cigarettes, and the laws on individual cigarette sales prevent paying that tax on a

³⁴⁶ Bland is included because her death is a unique case among many that are similar—something of an outlier in this argument but relevant to the discussion all the same. There are some who challenge Bland's death as a suicide. For this discussion, a coroner's report articulates the mode and manner of her death as consistent with a suicide. Whether she was properly monitored while in jail as one prone to suicidal ideations is a discussion entirely outside the scope of this research. Malcolm Gladwell, *Talking to Strangers: What We Should Know about the People We Don't Know* (New York: Little, Brown and Company, 2019), 218–39.

³⁴⁷ Gladwell, 226.

per-cigarette basis.³⁴⁸ Brown and his friends were walking in the street, albeit after allegedly shoplifting from a nearby store, an act the officer was unaware of at the time.³⁴⁹ Floyd passed suspected counterfeit currency for cigarettes at his local convenience store while under the influence of illegal drugs.³⁵⁰ Each of these crimes was minor. They were statutory violations of laws designed to protect ideas, commercial profit, regulatory revenue, and tax income. They were hardly worth the exchange of life for the debt owed to society.

The national conversation about police reform does not consider the federal, state, and local government's responsibility in these incidents. The enforcement of any criminal law includes death as a potential outcome in any arrest situation. The discussion about the cost of life versus the benefit of enforcing the law, however trivial, is non-existent. A trivial law, a suspect who refuses arrest, and police officers duty-bound to execute the office of their oath can be a deadly and regrettable combination. However, in the modern reform context, police are exclusively responsible for engaging with communities despite the multiplicity of actors and systems at play. There is no shared responsibility in repairing these relationships. Society and its police need to find a way to receive, share, and read feedback more meaningfully.

D. THE IMPORTANCE OF FEEDBACK

The relationships between coupling, its difficulties, and bounded rationality are essential because system boundaries, coupling, and feedback depend on one another. The power of systems thinking is in feedback. Everything in the system should improve the way it reads, thinks about, or augments current feedback. Similarly, everything within the system and its agents and clients is a form of feedback.³⁵¹ Where feedback is unclear, non-

³⁴⁸ Al Baker, J. David Goodman, and Benjamin Mueller, "Beyond the Chokehold: The Path to Eric Garner's Death," *New York Times*, June 13, 2015, <https://www.nytimes.com/2015/06/14/nyregion/eric-garner-police-chokehold-staten-island.html>.

³⁴⁹ "Michael Brown Is Killed by a Police Officer in Ferguson, Missouri," *History*, August 6, 2020, <https://www.history.com/this-day-in-history/michael-brown-killed-by-police-ferguson-mo>.

³⁵⁰ Hill et al., "How George Floyd Was Killed in Police Custody."

³⁵¹ Senge, *The Fifth Discipline*, 73–91.

existent, or challenging to receive, the system's status is unknown. That is the essence of bounded rationality. The way to end or limit the effects of bounded rationality is to improve feedback.

The more feedback a system receives that it can make sense of, the more likely the system will be immune to failure—as it is more responsive to incidental, accidental, and intentional inputs over time. By broadly programming layers of internal and external feedback mechanisms, both balancing and reinforcing, with multiple interconnecting pathways and frequency response, the system becomes more resilient. Not only does the system become more clearly focused on its performance, but it can become more attuned to its system space and the internal and external problems that affect it.

Feedback mechanisms can be thought of as “sensors” providing information that allows the system to adapt and maneuver more quickly within its problem space to create customizable and impermanent outputs to the system space's varied and non-linear problems. Think about the evolution of the automobile, for example. Cars before the late 1990s were virtually mechanical machines, complex systems within systems designed to move people and things from one place to another. As car sensors became more advanced in their ability to receive feedback and different types of sensors were introduced to vehicles, their ability to know more about themselves improved. The ability to inform operators about their system space improves their reliability in doing what they are supposed to do. Also, they inform operators about faulty performance, the status of everything under the sensor, and potential problems. Most recently, vehicle developers have introduced more complex external sensors that provide real-time, active monitoring of the vehicle's external environment as it is in motion to inform the driver about potential threats and needed adjustments. All of this monitoring, sensing, and informing makes the driving experience better, more reliable, and consistent with the expectations of driving—ultimately, to arrive somewhere.³⁵²

³⁵² Arturo Angel Lara Rivero, “From Complex Mechanical System to Complex Electronic System: The Case of Automobiles,” *International Journal of Automotive Technology and Management* 14, no. 1 (2014), <https://doi.org/10.1504/IJATM.2014.058366>. Cars are, technically, complicated mechanical systems; however, operating a car in traffic makes it part of a complex system, and the concept of feedback applies to both complex and complicated systems.

The same evolution is the ideal future scenario for policing. As much as reform applications have focused on improving internal feedback sensors, much of what is discussed in Chapter III of this thesis falls into this category. Reform has struggled to improve external sensors at the same rate. The system's ability to know and react to things outside the system in adapting, changing, or adeptly maneuvering is slow, inconsistent, and constrained by the system's self-established boundaries. Figure 4 is a visual model that demonstrates the ideal flow of external feedback into and out of a police organization and the pathways along which it can and should travel into the areas where liability often occurs and where policing as a practice is created, codified, trained, supervised, and executed. In this visual model, all feedback travels into and out of the organization through monitoring and processing mechanisms. The framework in Chapter III would serve well in this capacity.

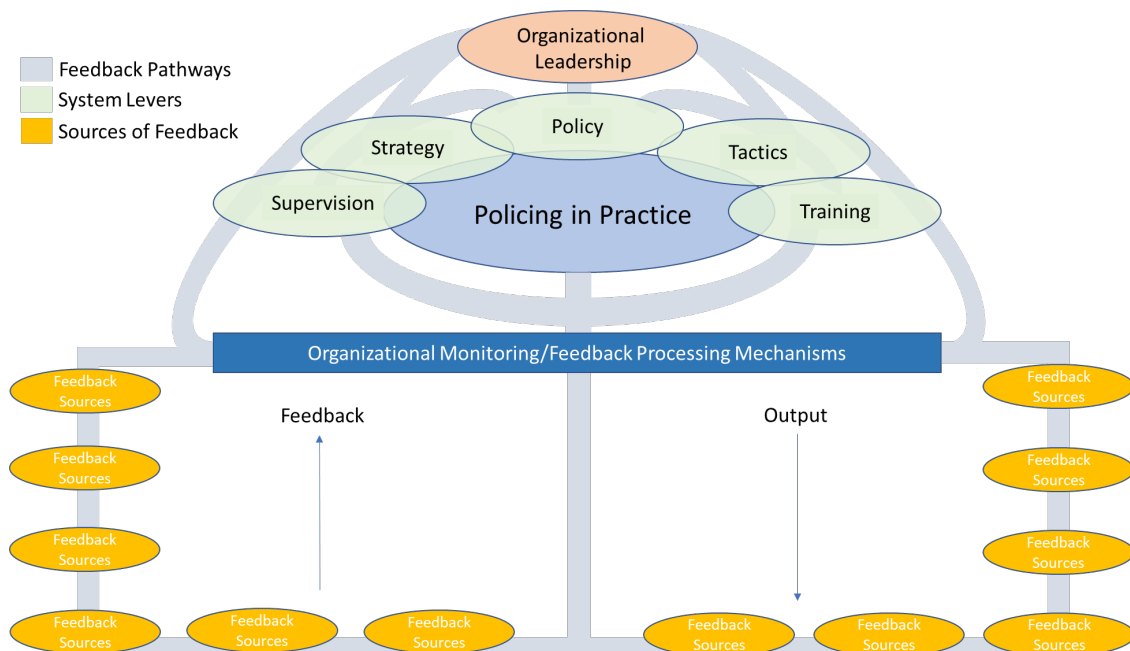


Figure 4. Policing in Practice

Theorists argue that in complex systems, broad, open, and interchangeable boundaries are essential to growth, agent interaction, and agency information, particularly

in dynamic systems.³⁵³ By incorporating multiple system pathways internally and externally, broadening the system's scope or boundary as a holistic mechanism, law enforcement can begin to innovate about the problems it faces, along with those faced by its communities. Doing so might make the necessary system adjustments to successfully achieve Samuel Walker's aim of achieving "legitimacy in the community's eyes."³⁵⁴

Research in the medical field and military has shown that "social institutions, as emergent structures created by the interaction of complex human agents, are successful because they shift complexity and therefore uncertainty to different scales."³⁵⁵ This means that by opening the system boundaries to partner with multiple societal layers, not only will internal and external feedback be more easily accessible, but it can help the system achieve more efficient and emergent operation, along with a marked improvement in resiliency.

Stockton, California, in seeking to reduce its violent crime rate, implemented partnerships between its city government, police department, social services organizations, and community leaders to create an officer of violence prevention (OVP). Staffed by "peacekeepers," social workers, gang advocates, and community leaders, the OVP combines community resources and social systems to interact with those likely to be involved in violent crime in the preventative frame. They also respond to areas where homicides occur in real time, and police resources interact with communities in responding to gang or violent crime, attempting to prevent retributive gang violence by engaging the communities in those volatile moments they are most vulnerable. The OVP's success is undeniable, seeing a reduction of 40 percent in homicides and 34 percent in non-fatal shootings in Stockton in 2018 and a similar decrease in 2017.³⁵⁶ In shifting complexity by opening the boundaries of multiple systems to create this effective partnership, Stockton

³⁵³ Shrivastava, Sonpar, and Pazzaglia, "Normal Accident Theory," 1379.

³⁵⁴ Walker and Archbold, *The New World of Police Accountability*, 272.

³⁵⁵ Ang Yang and Yin Shan, *Applications of Complex Adaptive Systems* (Hershey, PA: IGI Global, 2008).

³⁵⁶ "Office of Violence Prevention," City of Stockton, accessed December 14, 2020, <http://www.stocktongov.com/government/departments/manager/violprev.html>.

received feedback that enabled all stakeholders to partner in better managing, at least for a time, a severe societal problem.

Understanding the concepts of open boundaries and feedback response is not enough to pinpoint where policing fails in these areas. As Meadows contends in discussing archetypal system failures, achieving system resiliency is only possible by implementing reliable and robust feedback mechanisms.³⁵⁷ The reliability of the feedback is paramount; so, too, is its efficacy. Rather than merely acknowledging the need to engage the communities they serve, police systems must consider feedback mission-critical to future success, particularly in achieving a sense of resiliency.

E. INTELLIGENT RESILIENCE

Resilience is an organization's ability to recover from or limit the damage of accidents, failures, and mistakes. Research in organizational resilience finds several essential characteristics of a resilient organization. Summarized, there are three features important to policing. First, seemingly obvious is that the organization can comprehend changing circumstances and adapt to them quickly. Second, resilient organizations have strong communication lines both within the organization and with its clients or partners. Third, resilient organizations have a proactive posture in understanding and mitigating potential risks.³⁵⁸

Resilient organizations are adaptive, communicative, and proactive. In this sense, resilient organizations should think about feedback as a type of intelligence. There is an aspect of proactive, programmatic information-gathering akin to traditional intelligence-gathering in seeking feedback. Rather than the traditional application in law enforcement

³⁵⁷ Meadows, *Thinking in Systems*, 76.

³⁵⁸ Arjen Boin and Michel J. G. van Eeten, "The Resilient Organization," *Public Management Review* 15, no. 3 (2013): 429–45, <https://doi.org/10.1080/14719037.2013.769856>; Michael L. Schaefer, "Operating in Uncertainty: Growing Resilient Critical Infrastructure Organizations" (master's thesis, Naval Postgraduate School, 2011); Peter Fretwell and Taylor Baldwin Kiland, *Lessons from the Hanoi Hilton: Six Characteristics of High-Performance Teams* (Annapolis: Naval Institute Press, 2013); Krista S. Langeland, *How Civil Institutions Build Resilience: Organizational Practices Derived from Academic Literature and Case Studies*, RR-1246-AF (Santa Monica, CA: RAND Corporation, 2016); Eti Boehm-Tabib, "Characteristics of Organizational Resilience during a Security Crisis," *Comparative Sociology* 19, no. 4–5 (2020): 632–55, <https://doi.org/10.1163/15691330-BJA10023>.

for crime fighting, analysis, and prevention purposes, including the concept of intelligence-led policing, this model represents an intelligence-like mechanism designed to inform organizational performance.³⁵⁹ By definition, intelligence as a process is “an organized method of gathering and analyzing information, then disseminating it to the entities concerned. It also provides the opportunity to forecast changes, positive and negative, in time to do something about them.”³⁶⁰ Feedback-focused “intelligence” is effectively opportunity-analysis that develops into “actors, not reactors,” in emergent trends, patterns, and events.³⁶¹ Feedback, through the filter of systemic goals and their inherent purpose, informs system adjustments, behavioral changes, strategic maneuvering, and any number of different actions designed to align purpose with performance. Like intelligence-gathering, engaging proactively with feedback gives a system the ability to prepare for future operations, strategize on defenses, and mitigate potential threats.

F. A WAY FORWARD

Systems theory states that boundaries define systems but that boundaries are only definable based on the problem space, not the system space.³⁶² To this end, as Figure 4 demonstrates, law enforcement can begin to think about how to meaningfully open its boundaries and incorporate multiple, new, reliable, redundant, or overlapping external feedback mechanisms to improve the way it relates to communities, especially traditionally marginalized communities. To receive the kind of feedback it is missing to achieve resiliency, policing must begin to think about where to look for it. The answer almost certainly does not lie inside its internal systems, not in this case. It must engage the entire problem space rather than just those elements it creates or exacerbates. Resiliency requires that police organizations proactively pursue mutually beneficial balancing and reinforcing

³⁵⁹ Marilyn Peterson, *Intelligence-Led Policing: The New Intelligence Architecture*, NCJ 210681 (Washington, DC: Bureau of Justice Assistance, September 2005).

³⁶⁰ Mark Lowenthal, *Intelligence: From Secrets to Policy*, 8th ed. (Thousand Oaks, CA: SAGE Publications, 2020), 6, 9, 67.

³⁶¹ Lowenthal, 9, 179.

³⁶² Meadows, *Thinking in Systems*, 96.

feedback loops within the communities they police.³⁶³ To become resilient, they must pursue more consistent, relevant, and reliable feedback processes that engage everyone with responsibility in the systems.

There is almost an infinite number of potential applications for seeking feedback from external sources. Three reviewed here acknowledge the broader-spectrum social systems that interact with policing on some normal level and observe some lasting institutional benefits that improve feedback and reinforce resiliency over time. They involve policing to better society, to engage with the education system more meaningfully, and to collaborate with communities to police themselves.

1. Policing for the Betterment of Society

Policing of all types does not occur in a vacuum. It is the assurance that people will adhere to the agreed-upon set of rules that society values. It is the product of governmental decisions, legislative mandates, and the execution of the social contract. Any problems within policing as a system exist within society as a system, too. Ghettos, barrios, and other areas with similar names do not exist because the police created them. The socioeconomic or educational disadvantage of minorities is not the result of aggressive policing, nor is the endemic poverty that plagues most urban inner-cities in America.

The act of policing affects society, but the entire problem set requires considering its problems' broader truth. As a macrosystem, policing should then expand its reach to become a social activist for the betterment of society. Police agencies could effect real social change by leveraging their roles as systems within society as a system. Policing people, social groups, and communities is a system that helps to sustain order in society, a complementary system within a system. By acting on the feedback society provides, policing may affect both systems for the better.³⁶⁴

Perhaps it is possible that policing, as a complex adaptive system within society as a system, aware of its feedback and held to account for that of society, could adjust on

³⁶³ Meadows, 76.

³⁶⁴ Bayley, Davis, and Davis, "Race and Policing."

behalf of the more extensive system. Police organization administrations, their system agents, and resources could become advocates for social change. In other words, police officers could learn to understand their role in upholding the law but also their mechanism for controlling how the laws are applied for the greater good of society, protecting the marginalized, and making sense of the risk/reward relationships in how policing is executed as a practice, adjusted for the feedback it receives.

To do this, police organizations would need to expand their system boundaries to absorb feedback about how policing affects people and learn to tell the truth about themselves within the context of the broader social frame as a tool of government. They would need to learn to understand the narratives from and about policing and respond promptly and truthfully to them. There is power in police organizations taking ownership of their role in society and how they exist within and affect society.

The actual act of enforcing the law is no exception. Trivial regulations and statutes rooted in regulatory compliance, statutory social regulations, and tax revenue–related offenses are at the minimum subject to review based on the feedback society provides about their enforcement by police. In most states, the powers of arrest are limited only by compliance. Police powers are replete with language that demonstrates the “minimum amount of force necessary to effect an arrest” as the only limitation to a police officer’s ability arrest someone, leaving every arrest situation open to the possibility of a fatal encounter.³⁶⁵ The incidents involving Michael Brown, Eric Garner, and George Floyd demonstrate that enforcing even trivial laws on non-compliant subjects can result in fatal encounters with disastrous societal outcomes. With stakes so high and so little for society to gain—especially considering the aftermath of the Floyd death, even accounting for the officers’ potential misconduct—it is difficult to justify continuing to enforce trivial laws.

Police are capable of making sense of the law. Even beyond the freedom to make sense of enforcement granted by the law, during the COVID-19 pandemic, many law enforcement agencies, both sheriffs and municipal police, openly and vocally refused to

³⁶⁵ “Overview of Police Use of Force,” National Institute of Justice, August 6, 2019, <https://nij.ojp.gov/topics/articles/overview-police-use-force>.

enforce stay-at-home orders, mask mandates, and business closures. They argued that doing so was unconstitutional, and instead of enforcement, many offered to educate citizens rather than arrest them.³⁶⁶ This sort of sense-making about the law may be the way forward for police agencies in the United States but on a broader, albeit judicious, scale. Rather than risking national disasters by potentially taking a human life to enforce almost meaningless statutes, police agencies could begin to evaluate other laws with the same lens.³⁶⁷ They could learn to educate citizens about the perils of regulatory violations that may befall them should they continue to disobey the law. Police departments can provide resources to prevent future non-compliance while simultaneously educating lawmakers, the media, and society about the laws police will and will not enforce.

Policing can become a mechanism that draws attention to laws that disproportionately affect minorities through education, information, supporting documentation, and research. It would then fall on police administrators, as advocates for social change, to condemn laws publicly and honestly or refuse to enforce them openly when they disproportionately affect minorities and the poor.³⁶⁸ Doing so may not only create a series of empathetic feedback mechanisms for society and policing, but it may encourage the building of relationships and partnerships with those most affected by disparate lawmaking and enforcement. Potentially, policing could become a voice for those who traditionally find the police their only access point to a seemingly inaccessible broader government.

³⁶⁶ Zoe Nemerever, “Why ‘Constitutionalist Sheriffs’ Won’t Enforce Coronavirus Restrictions,” *Washington Post*, April 23, 2020, <https://www.washingtonpost.com/politics/2020/04/23/why-constitutional-sheriffs-wont-enforce-coronavirus-restrictions/>; Associated Press, “Some US Police Refuse to Enforce Virus Mask Mandates,” Courthouse News Service, July 27, 2020, <https://www.courthousenews.com/some-us-police-refuse-to-enforce-virus-mask-mandates/>; Jim Carlton, “Mandatory Mask Laws Aren’t Enforced as Coronavirus Continues to Spread,” *Wall Street Journal*, July 17, 2020, <https://www.wsj.com/articles/mandatory-mask-laws-arent-enforced-as-coronavirus-continues-to-spread-11594978200>.

³⁶⁷ Discretionary law enforcement is an oft-studied aspect of police work. Relevant here are the following: Brown, *Working the Street*; Kristin Buvik, “The Hole in the Doughnut: A Study of Police Discretion in a Nightlife Setting,” *Policing & Society* 26, no. 7 (October 2016): 771–88, <https://doi.org/10.1080/10439463.2014.989157>; Geoffrey P. Alpert, John M. Macdonald, and Roger G. Dunham, “Police Suspicion and Discretionary Decision Making during Citizen Stops,” *Criminology* 43, no. 2 (May 2005): 407–34, <https://doi.org/10.1111/j.0011-1348.2005.00012.x>.

³⁶⁸ Bayley, Davis, and Davis, “Race and Policing.”

The efforts of Stockton Police Chief Eric Jones and the Stockton Police Department demonstrate how engaging with the truth of policing in a community can help restore partnerships and open pathways for communications. Given the department's history of disparate, zero-tolerance policing and a historically aggressive approach to fighting crime, Chief Jones recognized that Stockton's trust gap was significant. Chief Jones and his department, bolstered by a \$5.75 million grant from the DOJ, engaged in a program of "reconciliation" to address its trust gap through "truth telling," "racial reckoning," and community listening sessions. The initiative demonstrated that Stockton's relationship with its citizens was higher than at any point since before 2015.³⁶⁹ Stockton's police and its community have created communication pathways that engage its history and current policing environment, the department's strategy and tactics, and the national policing narrative. Most important, the Stockton Police Department created consistent, reliable, and relevant resources for its organization's feedback and performance.

If policing is to be judged by the currency of trust, it has a responsibility to be truthful and transparent in keeping with the definition of trust in a social science context.³⁷⁰ Policing must learn to tell the truth not only about itself but about how it fits in the world. From a systems perspective, honest social dialogue between citizens and the officials who enforce and dictate society's laws is necessary feedback. It creates expanded pathways for feedback within several separate interconnected social systems and the bridge to a different way of thinking about the shared responsibility in closing the trust gap and preventing bounded rationality.

2. Engaging Education

One of Worden and McClean's central arguments in *Mirage of Police Reform* is that by the time children, who typically feel good about police at younger ages, reach the age of 14, their opinions reverse.³⁷¹ As they grow, children's beliefs about the world

³⁶⁹ Michael Friedrich, "A Police Department's Difficult Assignment: Atonement," Bloomberg CityLab, October 23, 2019, <https://www.bloomberg.com/news/articles/2019-10-23/what-police-community-reconciliation-can-look-like>.

³⁷⁰ Jackson and Gau, "Carving Up Concepts?"

³⁷¹ Worden and McLean, *Mirage of Police Reform*, 42–48.

around them are formed, in part, by their own experiences but also by those of their friends, families, and social peers. In the case of sentiment toward police in their communities, it has changed for the worse, and any future negative interactions affirm the distrust. They argue that trust-building as adults is difficult because of this ingrained social context that bombards children until it eventually overwhelms them.³⁷²

Additionally, research shows that Americans are woefully undereducated regarding their rights and responsibilities as citizens. Only nine states require one year of government or civics education in K–12 education, thirty require at least half a year, and eleven require no civics education of any kind.³⁷³ Civics education “means all the processes that affect people’s beliefs, commitments, capabilities, and actions as members or prospective members of communities.”³⁷⁴ Children of color and impoverished communities receive less education and lower-quality education than their white and wealthy peers.³⁷⁵

There are already several police applications in schools. School resource officers, education, and mentorship programs abound as features of many police and education partnerships, not to mention police officers assigned to schools for safety and security purposes.³⁷⁶ These varied relationships represent the coupling between policing as a system and public education as a system that exists already. Instead, in this application is the idea that the education system makes a deliberate effort to reintroduce civics education, partnering with police organizations to engage with students about policing and being policed in the educational system to improve policing and its outcomes for America’s

³⁷² Worden and McLean, 49–51.

³⁷³ Sarah Shapiro and Catherine Brown, “A Look at Civics Education in the United States,” *American Educator*, Summer 2018, https://www.aft.org/ae/summer2018/shapiro_brown.

³⁷⁴ Jack Crittenden and Peter Levine, “Civic Education,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Stanford: Metaphysics Research Lab, Stanford University, 2018), <https://plato.stanford.edu/archives/fall2018/entries/civic-education/>.

³⁷⁵ Janie Boschma and Ronald Brownstein, “The Concentration of Poverty in American Schools,” *Atlantic*, February 29, 2016, <https://www.theatlantic.com/education/archive/2016/02/concentration-poverty-american-schools/471414/>.

³⁷⁶ Spencer C. Weiler and Martha Cray, “Police at School: A Brief History and Current Status of School Resource Officers,” *Clearing House* 84, no. 4 (May 2011): 160–63, <https://doi.org/10.1080/00098655.2011.564986>.

students, society, and police. Policing is a cultural norm in the United States—so, too, should citizens understand their rights and responsibilities when it comes to the police.

The University of North Carolina at Chapel Hill hosts a program called Carolina K–12 through its Humanities for the Public Good Initiative, which provides current, relevant, socially aware curriculum to teachers for use in the state’s education system. One of the courses is titled “Police Officer’s 101.” It is an eighth-grade curriculum designed to engage students in the realities of policing. The course includes an officer question-and-answer period, role-playing, blocks on democratic ideals, the rights and freedoms of the Constitution, and the ardors of policing in American society.³⁷⁷ The course description reads as follows:

Students will learn about the responsibilities of police officers and consider what characteristics are required to be an effective police officer by participating in role plays and interacting with a visiting officer of the law. This activity will enable students to explore and dispel stereotypes about police, as well as learn appropriate ways to deal with conflict, advocate for their rights, and be responsible citizens.³⁷⁸

Policing is a nuanced trade. The laws that govern police action, arrest, use of force, and other policing functions are subtle, with complex variations. The same is true about the relationship citizens have with the police. There is a lack of human-to-human, actor-to-actor relationships, and a lack of understanding about one another.³⁷⁹ Engaging people on this level as an investment in building relationships and partnerships, and humanizing both actors as part of the system, is the lowest denominator of feedback that both reinforcing and balancing the system can create. Donella Meadows posits that a system with more feedback is more resilient than one with less feedback. In order to have any value, that feedback must be reliable, consistent, and relevant.³⁸⁰ Advocating for and

³⁷⁷ “Keeping Schools Safe—Exploring the Roles of Citizens and Police Officers,” North Carolina Civic Engagement Consortium, accessed December 14, 2020, <https://k12database.unc.edu/activity/?s=policing>.

³⁷⁸ “Police Officer’s 101,” Carolina Public Humanities, accessed December 14, 2020, <https://humanities.unc.edu/ck12/>.

³⁷⁹ Worden and McLean, *Mirage of Police Reform*, 51–54.

³⁸⁰ Meadows, *Thinking in Systems*, 76–78.

aiding education of this type consistently throughout K–12 education provides an opportunity to create informed, prepared, and educated citizens capable of the meaningful feedback processes required to balance law enforcement and its coupling with society moving forward.

At the very minimum, advocating for increased civics education gives a policing system the ability to create defensible arguments about society at large and its relationship to it. Leveling the playing field through partnering with the education system and activists by opening its boundaries and creating pathways for interaction as a more transparent entity might improve community relationships. It could also serve to create a sort of expected-behavior baseline. If trust is the setting and meeting of expectations, the policing system can help establish and manage expectations. In this effort, it can attempt to improve social trust in the long term by meeting young people where they are while empowering them to interact with the system with informed, realistic expectations and the ability to relate to it intelligently.

3. Partnering with Communities

A key feature of police reform centers on partnering with communities in meaningful ways.³⁸¹ Critics of police departments argue that white police officers predominately police neighborhoods of color and ethnic enclaves.³⁸² They argue that system agents do not understand the cultural history or nuances of their social groups. While there have been drives to improve police hiring in some areas, particularly black and Latino recruits, the divide remains. Recruiting among minorities remains a struggle for many reasons, including difficulties with testing and background checks.³⁸³ As a result, the problem of coupling with communities as partners in policing still exists. Implementing

³⁸¹ President’s Task Force on 21st Century Policing, *Final Report*, 41–50.

³⁸² Dan Keating and Kevin Uhrmacher, “In Urban Areas, Police Are Consistently Much Whiter Than the People They Serve,” *Washington Post*, June 4, 2020, <https://www.washingtonpost.com/nation/2020/06/04/urban-areas-police-are-consistently-much-whiter-than-people-they-serve/>.

³⁸³ Patrick Oliver, “Creating a Multicultural Law Enforcement Agency: An Intentional Priority,” *Police Chief Magazine*, March 8, 2017, <https://www.policechiefmagazine.org/creating-a-multicultural-law-enforcement-agency/>.

community patrols may be a way policing and people can meaningfully unite, increase shared feedback, and improve coupling.

In Australia, there has been a long-standing struggle to integrate aboriginal Australians into modern society successfully. A people historically plagued with poverty, crime, and substance abuse, among many other social problems, aboriginal Australians had been policed aggressively.³⁸⁴ A 1991 report by the Australian federal government detailing abuses against aboriginal Australians, including questionable deaths, opened the door to a national conversation that produced a series of forward-thinking reforms, including “community patrols.”³⁸⁵ Community patrols are self-organized teams of aboriginal citizens who police their communities in conjunction with professional police. The community patrols mainly serve the traditional Western construction of community policing but do so from a framework of community trust, social intervention, education, and prevention.

Tasked with policing quality-of-life issues, minor crimes, substance abuse, and other minor offenses within their communities, community patrols lend a positive presence of order and avoid enmeshing natives unnecessarily into traditional criminal justice structures.³⁸⁶ Community patrol programs have been successful in Australia, and they are now supported by funding, training, and materiel support from the Australian Department of Health, which has codified their official role.³⁸⁷ Known benefits include a self-determinative factor for the native people in their interactions with the government,

³⁸⁴ Thalia Anthony and Harry Blagg, “Enforcing Assimilation, Dismantling Aboriginal Families: A History of Police Violence in Australia,” *Conversation*, June 18, 2020, <http://theconversation.com/enforcing-assimilation-dismantling-aboriginal-families-a-history-of-police-violence-in-australia-140637>.

³⁸⁵ “Indigenous Deaths in Custody: Report Summary,” Australian Human Rights Commission, accessed July 19, 2020, <https://humanrights.gov.au/our-work/indigenous-deaths-custody-report-summary>.

³⁸⁶ Harry Blagg and Giulietta Valuri, “Aboriginal Community Patrols in Australia: Self-Policing, Self-Determination and Security,” *Policing and Society* 14, no. 4 (December 2004): 313–28, <https://doi.org/10.1080/1043946042000286047>.

³⁸⁷ Peter d’Abbs and Sarah MacLean, “Community Patrols,” in *Volatile Substance Misuse: A Review of Interventions*, Monograph Series no. 65 (Canberra: Commonwealth of Australia, 2008), <https://www1.health.gov.au/internet/publications/publishing.nsf/Content/drugtreat-pubs-volatile-toc~drugtreat-pubs-volatile-pa2~drugtreat-pubs-volatile-pa2-10~drugtreat-pubs-volatile-pa2-10-5>.

increased policing effectiveness, lower recidivism rates, cost-effectiveness, and community ownership and buy-in.³⁸⁸

Community patrols are not foreign to the United States. New York City is home to two examples. The ultra-orthodox Jewish community in Brooklyn privately funds its community patrol called the *Shomrim*, Hebrew for “guardian.” The Shomrim is part police liaison and part community patrol. In many ways, it polices its enclaves independently of the legitimate government policing agencies.³⁸⁹ The Muslim Community Patrol, also in New York City and similar to the Shomrim, is a private community patrol–liaison hybrid in the predominately ethnic Muslim enclaves of Brooklyn.³⁹⁰ Both organizations’ critics make accusations of corruption, violence, brutality, racial and cultural bias, and thuggery, citing a lack of regulation and political complexities as a primary cause.³⁹¹

Government-backed, funded, and trained community patrols organized, led, recruited, and managed based on community priorities may accomplish what “traditional” strategies have failed to do. They provide citizens with the ability to positively access the policing system while also creating pathways for feedback and interaction as both policing and social groups improve perspectives on either end of the system. Most important, it provides a way to couple policing with community leaders and allows the conversation about policing, how it occurs both strategically and tactically, to occur collaboratively.

G. CONCLUSION

Systems thinking requires, to an extent, the abandonment of linear causal thinking, which is the basic concept of cause and effect. Instead, in complex systems, causal

³⁸⁸ Harry Blagg and Giulietta Valuri, “Self-Policing and Community Safety: The Work of Aboriginal Community Patrols in Australia,” *Current Issues in Criminal Justice* 15, no. 3 (March 2004): 205–19, <https://doi.org/10.1080/10345329.2004.12036294>.

³⁸⁹ Alan Feuer, “Brooklyn’s Private Jewish Patrols Wield Power. Some Call Them Bullies,” *New York Times*, June 17, 2016, <https://www.nytimes.com/2016/06/18/nyregion/brooklyns-private-jewish-patrols-wield-power-some-call-them-bullies.html>.

³⁹⁰ Alexandra E. Petri, “Muslims Form Community Patrol. Some Neighbors Say No, Thanks,” *New York Times*, February 3, 2019, <https://www.nytimes.com/2019/02/03/nyregion/muslim-community-patrol-brooklyn.html>.

³⁹¹ Feuer, “Brooklyn’s Private Jewish Patrols.”

relationships exist in loops of “feedback processes.”³⁹² Feedback processes are the circular or cyclical relationships in which problem-set variables work with or against one another to create a desirable or undesirable outcome in the system. Affecting any single variable changes the behavior of the entire set of variables. These feedback processes include the system’s behavior and its agents, managers, and clients. In turn, this behavior changes the feedback, and the process starts anew, without end. Senge argues that this awareness of both affecting and being affected by system behavior also reframes the concept of responsibility for a system’s behavior. He argues that everyone shares responsibility for the problems generated by a system.³⁹³

To improve the way it couples with the people it polices and the systems it shares space with, policing can seek to cultivate feedback processes that include people, social groups, and communities. Externally focused and inclusive feedback processes, if successfully implemented, have balancing and reinforcing benefits for all of the systems policing interacts with depending on perspective and system goals. Better coupling can create a means by which systems can become more responsive to become more resilient. The trust gap that separates people from police and the bounded rationality that perpetuates it exist mostly because reforms focus on internal mechanisms rather than external needs, which can only be discerned clearly through engaging, consistent, and sought-after feedback.

Implementing approaches that engage systems of people that police systems engage with regularly in ways that create cooperative feedback processes can improve all aspects of policing. Serving as advocates for those without a voice, engaging with the education system, and partnering with communities to police themselves may well serve to create a whole open-boundary system and interactive feedback processes that bridge the trust gap. As demonstrated in both Stockton, California, examples, bridging the trust gap is key to better system operability. Trust and the feedback it yields are essential in creating consistent social resiliency between people and their police forces.

³⁹² Senge, *The Fifth Discipline*, 74.

³⁹³ Senge, 73–79.

The next chapter synthesizes the research in this thesis. It discusses the findings of the research in each chapter and the impact of the combined findings. Additionally, it makes conclusions about what the research means for policing in the long term. Finally, it suggests recommendations to bridge the gap between the current problems affecting policing and achieve better outcomes in the future. It also suggests future research of police systems as systems, system thinking, and complexity.

VII. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This thesis sought to research whether applying systems theory principles would improve police organizations' performance and resiliency over the currently employed traditional reform strategy. The question was rooted in three substantial footings at the outset. First, police reform's fundamental purpose is to improve police organizations and the way they perform their duties, particularly in how they relate to people and communities.³⁹⁴ Reforms of the 20th and 21st centuries introduced standardization of police performance, accountability, oversight, and transparency to policing.³⁹⁵

The second footing is the acknowledgment that traditional reform struggles to improve police departments. Many scholars agree that police departments and policing on the whole find reform challenging to sustain over time.³⁹⁶ While they disagree, to an extent, as to why reforms are difficult to sustain, both camps generally agree that police organizations' management and confusing feedback on performance are among the leading causes of police agencies' failure to reform.³⁹⁷ Unsuccessful reform efforts and inadequate policing practices allow an environment in which policing finds itself at odds with communities, particularly those dominated by low-income families and people of color.³⁹⁸ In 2020, 91 percent of Americans, based on a Gallup poll, felt America's police needed significant reform.³⁹⁹

The final footing is that police departments are complex adaptive systems and are, therefore, subject to systems theory principles. Dietz and Mink describe the characteristics

³⁹⁴ Walker and Archbold, *The New World of Police Accountability*.

³⁹⁵ Rushin, "Federal Enforcement of Police Reform."

³⁹⁶ Walker and Archbold, *The New World of Police Accountability*, 30; Worden and McLean, *Mirage of Police Reform*, 5.

³⁹⁷ Worden and McLean, *Mirage of Police Reform*, 196; Walker and Archbold, *The New World of Police Accountability*, 268–70; Brown, *Working the Street*, 303; Patel, "Toward Democratic Police Reform," 793.

³⁹⁸ American Civil Liberties Union, "Policing Practices."

³⁹⁹ Crabtree, "Most Americans Say Policing Needs 'Major Changes.'"

that identify police organizations as complex systems. As part of their conclusions, they suggest future research needs to apply systems theory to police systems and analyze how such a strategy might prepare them to “make sense of today’s policing challenges.”⁴⁰⁰

A. OPTIMIZING POLICE SYSTEMS FROM A SYSTEMS ORIENTATION

A systems-based approach might prove more useful in resolving many of the recurring issues that hamper policing in the United States than traditional police reform. Much of reform focuses on creating high reliability in police systems without addressing the systemic issues that create the problems in the first place, and many of the fixes put in place constrain the system even further.⁴⁰¹

As living systems, police systems will always exist in a state of change. The role that humans play and the various other systems the police interact with that also involve human beings as their primary agents all but guarantee that police systems will always have some volatility, uncertainty, and ambiguity as part of their natural state.⁴⁰²

System optimization is a way of thinking about how to eliminate system constraints while encouraging innovations that create ideal system behavior. System optimization is priority setting within a system to drive continuous improvement.⁴⁰³ Much of the work in optimizing systems is based on Deming’s theory of profound knowledge, which involves four aspects:

- Intentionally managing systems
- Embracing the nature of systems and their variable characteristics
- Accepting as true only that which can be proven
- In living systems, the psychology of agents plays a significant role.⁴⁰⁴

⁴⁰⁰ Dietz and Mink, “Police Systems and Systems Thinking,” 14.

⁴⁰¹ Walker and Archbold, *The New World of Police Accountability*, 5, 182–83; Worden and McLean, *Mirage of Police Reform*, 206.

⁴⁰² Senge, *The Fifth Discipline*, 42, 269, 322, 365.

⁴⁰³ Deming and Cahill, *New Economics*, 53, 100; Pyzdek and Keller, *The Handbook for Quality Management*, 76–77.

⁴⁰⁴ Pyzdek and Keller, *The Handbook for Quality Management*, 35–36.

Deming's work led to his creating a system management framework called total quality management (TQM), which embodies the theory of profound knowledge in that it is a deliberate system designed to improve (or grow) system capacity.⁴⁰⁵ TQM recognizes that leverage exists in system volatility, that change is inherent in systems, and that systemic change is a manageable property. One of the primary principles of TQM is that in order to manage a system, measurable metrics or feedback must be elicited from it.⁴⁰⁶ TQM is as much a philosophical framework for managing systems as it is a system of managing systems. Systems remain under a constant monitoring state and have a robust ability to receive, read, and interpret feedback. System adaptations occur based on that feedback. In TQM, everyone is responsible for one's system and problem space. TQM is a collaborative strategy for flattening system structures and improving the speed and quality of decision-making.

For law enforcement agencies, system management that encompasses these characteristics is almost non-existent in this form. There are some applications of a TQM-style approach in the Canadian police services and some similar constructions in the United States. These structures mainly serve as internally focused accountability mechanisms; however, the Bakersfield Police Department's Quality Assurance Unit demonstrates a whole-system approach that, in many ways, captures the essence of Deming's theory of profound knowledge. The research demonstrated a systems approach that incorporates a philosophical TQM framework could improve police performance by creating monitoring structures that capture and measure feedback from inside and outside the system. Feedback and system management give it the ability to quickly respond to changes and unwanted system behaviors, limit system failures, mitigate the scope of those failures, and provide opportunities to leverage positive behavior to the system's benefit.

⁴⁰⁵ Talha, "Total Quality Management," 15.

⁴⁰⁶ Senge, *The Fifth Discipline*, 312–13.

B. BUILDING AGENT COMPETENCY TO IMPROVE SYSTEM PERFORMANCE

One of the core tenets of traditional police reform is the training and education of police officers.⁴⁰⁷ Yet, the approach to improving performance through training and education is short-sighted and inadequate to improve the system. Training in the reform construction focuses primarily on reactive responses to events that occur instead of teaching agents to think at a higher level and reflect on how their actions can positively and negatively affect their policing systems.

Reform scholars struggle to understand the inconsistency of police officer behavior and how to capture and replicate positive behaviors while eradicating undesirable behaviors.⁴⁰⁸ From a systems perspective, the answer may lie in the ability to process information cognitively. Dietz and Mink observed that system agents who apply their tacit knowledge in solving problems benefit their systems. Tacit knowledge is gained through experience and implicit reflection on what has been learned as a result.⁴⁰⁹

Senge notes that system behavior is the product of a system's structure. Instead of focusing exclusively on system behavior, which is short-sighted, systems thinking should concentrate on the deep-learning cycle: "beliefs and assumptions, established practices, skills and capabilities, networks of relationships, and awareness and sensibilities."⁴¹⁰ In other words, Senge argues that problem-solving in systems is not reactive but generative. Donald Schön calls this process "reflection in action." He argues that most influential practitioners assess and evaluate in the process of doing and make iterative adjustments to action.⁴¹¹ They can learn from their experiences while also experiencing them while also creating an almost predictive ability based on past experiences and reflections. What is more, deep learning and reflection in action are processes that can be emphasized culturally to improve system performance.

⁴⁰⁷ President's Task Force on 21st Century Policing, *Final Report*.

⁴⁰⁸ Worden and McLean, *Mirage of Police Reform*, 193–96.

⁴⁰⁹ Dietz and Mink, "Police Systems and Systems Thinking," 13.

⁴¹⁰ Senge, *The Fifth Discipline*, 286–87.

⁴¹¹ Schön, *The Reflective Practitioner*, 68.

The growth of the Singapore Police Force under Commander Khoo is an example of how reflective practice and leadership that emphasizes systemic performance and shared responsibility for improved performance grow learning organizations. Creating cultures that emphasize the ability of agents to approach the organization's problem and systems spaces with a focus on continuous improvement relies on a shared vision, values, and mission focus.⁴¹²

The ability to think generatively is directly proportional to the ability to learn. Education, formal education specifically, is not a central focus in the qualification of police officers. Training is programmatic and job specific. In 2020, the International Association of Chiefs of Police began to recommend formal education for police officers to improve outcomes. Formal education may improve police outcomes because it increases the number of tools available to the system's agents. Rather than the knowledge gained by education, it may be much more critical that people with formal educations have better learned how to learn.

Building the learning capacity of system agents improves the agents' response to the events and behaviors that occur within the system. Generative learning, the deep-learning cycle, reflection in action, or tacit knowledge improves system performance. Foundational to each of these descriptions of the same essential processes are learning and analyzing what is learned from past experiences and synthesizing that learning with future behavior. An organization's ability to assess its problem and system spaces, capabilities, strengths, and weaknesses is central to its ability to adapt or change to best suit its environment's complexity or volatility.

C. UNDERSTANDING SYSTEM CONTEXT AND GOAL-SETTING FOR SUCCESS

A system's context, that is, its environment, can confuse the system's goals and prevent them from functioning as designed. Better goal-setting and an awareness of the constraints environments can improve system performance. Police organizations'

⁴¹² Senge, *The Fifth Discipline*, 192.

executives and leadership, aware of their environments, can improve performance and set achievable goals.

The City of Seattle and its police department are good examples of how context constrains police system performance. From a reformed perspective, the Seattle Police Department is one of the most progressive police agencies in the United States. Seattle's reforms center on creating legitimacy and procedural justice outcomes. Moreover, Seattle's police department created an environment, mainly through the micro-community model, in which systems management should be possible and relatively practical.

The contexts of policing in the macrosystem and microsystems that make up policing in the United States make legitimacy a problematic proposition. Confidence eroded over the idea of policing in the macrosystem often overrides or undermines social capital built in the microsystems—the local police organization, precinct, neighborhood, and beat. What is more, Seattle and its reaction as a city and police organization to the CHOP situation created on some level a question about its institutional legitimacy in fleeing its police precinct and leaving its citizens unprotected.

As a police system exists within a social system, Seattle exemplifies a police organization constrained by its greater social system. The Seattle Police Department's goals and local political environment, including its consent decree management, and the local population's surveyed expectations do not generally align. Seattle's police find themselves pulled in many different directions.

A way forward for Seattle, and policing in general, is to divest from sociological problems while acknowledging their impact on several systems. Policing could maintain “tactical agency” over the act of policing while developing a “strategic voice” to serve as its influence among the many competing influences with which it finds itself often engaged.⁴¹³ This dual role of policing can help it understand its strategic role better while engaging with sociological problems from a proactive rather than reactive position.

⁴¹³ Bayley, Davis, and Davis, “Race and Policing.”

Considering goals of policing from a macrosystem perspective might help police organizations better navigate the contexts they have to contend with in their many different microsystems. A goal that captures American law enforcement's essential purpose, nothing less and nothing more, might help establish a standard to measure police conduct across the board and standardize expectations of America's police. Stabilization of this sort might help rewrite the police's role in balancing the variability of competing social goals and creating a framework by which police systems and the social systems that interact with them can be compared and judged. Police systems may find legitimacy from both an institutional and social perspective more manageable to obtain in this setting.

D. SEEKING FEEDBACK AND FINDING RESILIENCE

In most ways, America's police fail to couple well with communities, social groups, and people, limiting their resilience. Coupling is the idea of connecting to two things. For systems, coupling has two meanings. First, it connects two system components, like connecting wheels to a car. Second, it connects two systems, like connecting a car to a trailer. Both exist as systems, but each affects the other and becomes a more extensive, complex system. Boundaries are the space where two systems connect.

Policing struggles to connect with people for two reasons: trust gaps and bounded rationality. Complexity amplifies the effects of both of these. There is a trust gap between the differing expectations of policing and the way it interacts with people. The trust gap largely exists because the actions and the expectations of police do not always align. Historically, policing reflects society's struggles to relate to the poor and people of color, creating a long-standing mistrust between people in those categories and police officers. Police performance suffers as a result.

Decisions about a system's behavior made without all of the information about the system is called bounded rationality. Often caused by unavailable feedback or system information distant from the decision maker, bounded rationality can cause many problems, including undesirable system behavior, bad decisions, and a reliance on the wrong kind of feedback. Sometimes important feedback goes ignored or unrecognized by a system's decision-makers.

Traditional reforms focus on the internal operations of police organizations. As a result, police organizations under-develop external sources of feedback about police system performance. Feedback is vital to systems, and through feedback, systems learn about themselves. The more feedback a system has access to, the more it can learn. Feedback mechanisms are like sensors telling the system about its various components and its overall performance and efficiency. Feedback comes in all forms. For police systems, data and people make up the most critical sources of feedback.

One way to increase feedback response is opening system boundaries and partnering with feedback from other systems. Another way is to elicit feedback programmatically by engaging with more communities, social groups, and people about the system's performance. Feedback is the key to creating resiliency. Police organizations can create better feedback by engaging deliberately with society, partnering with the education system, and empowering communities to participate in policing their neighborhoods.

E. CONCLUSIONS

To reformers, politicians, and police leaders, uncertainty does and should create anxiety. It means that in understanding and administering policing to achieve the ideal state, oversight, accountability, supervision, and transparency must exist as policing priorities.⁴¹⁴ They are the key to preventing as many negative consequences as possible. That said, fear should not prevent them from thinking differently about policing. The sooner those who make decisions about these systems start to understand their characteristics and interact with them, the sooner they can begin to work with them effectively—thinking about systems as systems helps to create characteristics that ensure more resilient and desirable outcomes. The better they understand systems and complexity—and the potential chaos or opportunities they present—the more effectively the system can learn about itself and be changed to match the desired outputs.⁴¹⁵

⁴¹⁴ Shrivastava, Sonpar, and Pazzaglia, “Normal Accident Theory.”

⁴¹⁵ Senge, *The Fifth Discipline*, 69–72.

Each chapter of this thesis sought to understand why American policing performs as it does and how understanding systems' behavior, especially in complex systems, might help explain why policing as a system often struggles to do what it intends. More than that, it attempted to identify points of leverage to improve policing not only in the abstract but in ways that police organizations can use to improve themselves. This in itself—the idea that an abstract system involving all police organizations, comprising many thousands of authentic, brick-and-mortar police institutions across the United States and each affecting the others, impacts the very existence of each—is a lesson that systems thinking has to teach.

Police organizations, no matter the size, are inherently connected as a system. Each bears an intrinsic responsibility to the others to learn to perform in a way that benefits the system as a whole. One need look no further than the George Floyd incident to see that a single call for service can affect every single police organization in the United States for years to come. The Floyd disaster will long be characterized as a tragedy for law enforcement agencies. Those who understand systems recognize where disaster occurs, but also where opportunity lies. Police organizations worldwide are being forced to reimagine the way they think about policing, managing police organizations, and policing outcomes. “Metanoia” is the title of a chapter in Peter Senge’s *Fifth Discipline*, in which he introduces the reader to systems and thinking about systems. Metanoia is a theological term meaning “a transformative change of heart.”⁴¹⁶ Senge is as enthusiastic as Meadows, who at the outset of her book *Thinking in Systems*, calls systems thinking “a way of thinking that gives us the freedom to identify root causes of problems and see new opportunities.”⁴¹⁷ Perhaps the post–George Floyd age of policing will usher in an era of metanoia for America’s police agencies.

⁴¹⁶ *Merriam-Webster*, s.v. metanoia, accessed February 14, 2021 <https://www.merriam-webster.com/dictionary/metanoia>.

⁴¹⁷ Meadows, *Thinking in Systems*, 2.

1. Create a Platform

There are four significant conclusions drawn from the research in this thesis. First, creating a platform for managing and sustaining the flow of information within and about police systems to connect executives and agents with information about the system could improve all aspects of policing. Such a mechanism serves as a sort of perpetual system monitor. It reminds a police agency's executives about the nature of the system and the benefits of monitoring to maintain it. A system management framework also helps all system agents recognize systemic leverage points to steer the system toward its goals. As evidenced in Bakersfield, system management creates action within the system and manages feedback mechanisms, thereby improving performance and resilience.

Effective systems also require constant care and monitoring—they need nurturing. Thinking about systems is one thing; enabling them to maneuver is another. Effective, emergent systems recognize themselves as systems. They recognize their ideal and current states and adjust to move in the right direction. Within that ability to move, adjust, and maneuver based on the system's needs in the world around it is the very essence of the power of systems.

The reflexive ability to understand behaviors and change them by building system management structures in police organizations will improve resiliency and organically create legitimacy where traditional reforms do not. This proactive approach to improvement is adaptable to any number of problem sets whereas traditional reform structures as they currently exist are necessarily reactive and inflexible. System structure sets the stage for system behavior, establishes a mechanism that focuses on a whole-system approach, and embraces the strategic philosophy of management found in TQM or its underlying principles found in the theory of profound knowledge. This approach effectively seeks to measure, perpetually, everything about the system, trusting only that which is captured, and seeks to elicit feedback from every internal and external relevant, accessible source.

2. Improve Agent Competency

The second important conclusion is that improving agents' competency within a police system will improve the system's behavior and bolster its structure. Agent capacity will make the system more resilient and perform better. Agent capacity can be encouraged programmatically, teaching police officers how to learn. Education derived from experience, traditional or non-traditional education, and an understanding of how to leverage learning while doing, to become genuinely reflective practitioners, has immeasurable value for the future of police systems. Police organizations that learn to cultivate a collective culture with a shared vision that values experience and the virtue of learning and empowers systems thinking can create healthy, robust learning environments.

American police agencies should increase their agent capacities to become generative thinkers, which will improve their systems' performance. Generatively thinking about police systems and their problems will develop police departments into learning organizations and their agents' abilities to learn more and in different ways. Additionally, practicing generative thinking can improve performance and resiliency and develop both collective and individual leadership abilities. Investing in police officers' skills and abilities through a shared vision and teaching police officers how to learn will create high-performing cultures, higher-order thinking, real problem-solving police officers, and administrators attuned to their systems and roles within them. Last, strategically investing in agent capacity has a mitigating effect. Better decision-making and leadership will help eliminate the "bad agent" behaviors that create divides between police and their communities in ways reforms never successfully have.

3. Understand System Context

Third, police must gain an awareness of how system context impacts police systems and how policing affects its environments, while understanding how both sets of goals affect policing in the United States. Seattle is a microcosm of circumstances facing police organizations across the United States. Policing often finds itself awash in contextual effects on police systems. Because they all exist as part of the macrosystem of America's police, how they deal with the problem spaces of context is essential—each can affect the

other. Each helps to form both its microsystem context and the macrosystem context. As a result, it stands to reason that police systems must set their goals based on a macrosystem ideal of policing, just as reforms do, but understand the contextual obligations and obstacles in carrying out those goals.

Where the context—the surrounding system environments—challenge the police systems’ ability to reach their goals, they must learn to challenge that context to the degree to which they can pursue their goals to be effective systems. It essentially becomes a matter of constraint management. The environment becomes the constraint, at which point the system must learn, for its own sake and those around it, to eliminate or strategically outflank that obstacle. At the same time, each police system must learn to be accountable to all of its microsystem contexts. When a history of policing abuses bound trust-building or politically motivated, counterproductive contextual environments, police system executives must learn to answer for both.

4. Recognize the Value of Feedback

Fourth, as systems, police organizations must learn to recognize the value of feedback in creating resiliency and effectively managing their microsystems. Police organizations can proactively engage feedback to create social resilience and connect with social groups, communities, and people to stabilize and reinforce police systems.

Better coupling with systems of people, such as communities and social groups, to assimilate them as part of the law enforcement process can transform the behavior of policing as a complex system and the systems with which it interacts. Improved system coupling creates broad pathways to improve feedback. Better, more reliable feedback builds relationships, trust, and, most important, shared responsibility that leads to a social resiliency that traditional reforms fail to deliver. To put it simply, connecting with people in meaningful, lasting dialogue and fostering partnerships that create communication pathways outside the police organization’s internal systems may help police organizations better understand how to serve people and help society better understand its police. Quality, lasting relationships between people and their police may lead to less volatility in policing outcomes.

Police organizations should find creative ways to engage people, especially in communities traditionally marginalized by society. Seeking feedback, like intelligence-gathering, can have any number of reliable sources. Opening boundaries in distinct areas with which system policing overlaps could provide long-term reliable feedback sources, cultivated over time, and untainted by historical abuses. Acting as a voice of the marginalized and partnering with people for the greater good of society could have a lasting effect on changing people's minds about who their police are and open communication lines that did not previously exist.

Also, there is a real benefit to collaboratively educating as separate-but-coupled systems, empowering, and informing students about their responsibilities as citizens, their rights when contacted by police, the reason police officers take certain precautions, and procedures for reporting a crime and seeking redress against perceived police impropriety. There is a place in these discussions for a social conversation about perceived police abuses and local community-policing problems—and how policing is done and perceived in these communities.

Community patrols represent another opportunity to improve feedback and restore relationships while eliminating some dangerous and trivial conflicts between police and citizens. Also, partnerships between officers and community members help create a lasting communication line and ensure equity. All three of these examples of open-boundary feedback opportunities also represent a new recruiting ground for police officers outside the normal streams, particularly in areas where police officers' recruiting has been difficult in the past.

F. RECOMMENDATIONS

Based on the research and conclusions of this thesis, I recommend the implementation of a systems approach to police organization management. There is significant value in creating structures to manage police systems by gathering and interpreting internal and external feedback. By measuring the system's behavior against the expected outcomes, police organizations can seek opportunities to improve performance throughout the system perpetually. This management framework also

demonstrates a commitment to systemic oversight and accountability through inspection, audit, and programmatic review of patterns and practices.

Police administrators and executives, along with those who guide police departments, such as professional standards organizations and industry think-tanks, should explore opportunities to expand agent capacity through systems thinking and systems management training at every practitioner and executive level for all police officers in America.

There is also a place for police organizations to learn to become more thoughtful in approaching their environments, both those it creates and those with which it is forced to interact. There is value in challenging the status quo of policing both in the narratives surrounding it and its engagement with society. There is an opportunity for policing to change the conversation about it. Police organizations can become an active voice in changing the narrative in the sense of what is said about policing but also in people's hearts, many of whom rightly distrust America's police.

Finally, some of the system observations and conclusions in this thesis will improve a police organization's performance in ways traditional reforms have not. The real power of the findings of this research is in the nature of systems themselves. The whole is more powerful than the sum of its parts. Combining these ideas to create robust police systems provides them with the reflexive ability to function as a part of the world rather than apart from it. A police system attuned to its performance, managed by skilled thinkers, operated by reflective agents, in which both the system and its agents understand its goals and context, will be a powerful, successful system. By adding to those characteristics wide-reaching internal and external sensors touching every aspect of the system's performance and a mindset of continuous monitoring for improvement opportunities, however slight they might be, the system becomes more than merely high-functioning or efficient. It becomes a resilient, reflexive system.

G. FUTURE RESEARCH

The combined approach of this thesis is the synthesis of different practices throughout policing to leverage a systems framework for police organizations' benefit. The

synthesis is mainly theoretical as of this writing. Future research might study the implementation of these approaches in municipal police organizations to determine whether the findings bear fruit in practice. Additionally, future research might include ways to introduce a system approach operationally to police organizational performance to improve the physical act of policing as well. For example, a reflexive system's management strategy expanded to focus on operational policing activities, especially in environments optimized for system performance like Seattle's micro-community strategy, in the hands of reflective systems-thinking practitioners, represents an exciting research opportunity. Additionally, there is an opportunity for future research to explore what system structures lend themselves to better policing outcomes.

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