Two Kinds of Problem-Solving*

forthcoming in *Policing: A Journal of Policy and Practice*Published version available at https://academic.oup.com/policing/advance-article-abstract/doi/10.1093/police/paac073/6658662

July 2022

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^{*} Thanks to Jim Doyle, Jay Meehan, and three anonymous reviewers for helpful feedback.

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ABSTRACT

Many of problem-oriented policing's most thoughtful students have worried that it makes unrealistic demands on officers, and that police might need to settle for a less ambitious version of Goldstein's original model. This paper argues that these worries and suggestions rest on a faulty interpretation of that model's logic. The most significant feature of problem-oriented policing lies not in the identification and resolution of community problems but in the identification and reform of defective organizational routines. "Problems" are signals that organizational practices are failing, and "problem-solving" is the work of analyzing how they can be reformed. This interpretation has implications for the kind of knowledge problem solving should rely on and the organizational structure in which it should be embedded.

As violence surges across the United States, the anger about police abuse that recently drove the largest protests in American history continues unabated. Many people have given up on police reform entirely, hoping to find alternative ways of keeping neighborhoods safe that do not rely on the police at all. Those who believe that policing remains indispensable need an account of how the police can do their work while using their authority in a more restrained and humane way than they often have.

The problem-oriented policing model that Herman Goldstein first articulated more than 40 years ago remains one of the best frameworks to meet this need because it simultaneously aims to preserve the peace more effectively and to use police authority more sparingly. It evolved out of Goldstein's early work grappling with the problem of police discretion, which sought to make police work more transparent, reflective, and restrained and to encourage officers to embrace a wider range of tools other than arrest and prosecution (Thacher 2016: 540-548). By seeking out new ways of resolving and preventing difficult community problems that minimize the use of law enforcement, problem-oriented policing can dramatically reduce arrests, use of force, and other forms of police coercion without sacrificing effectiveness (Goldstein 1977: 71-92; Scott 2005; Engel and Eck 2015). In Cincinnati, for example, it became the centerpiece of a years-long reform agenda pressed by activists, civil rights lawyers, and federal oversight agencies that substantially reduced police contacts, arrests, and use of force while simultaneously reducing crime (Eck 2014; Semuels 2015).

Despite its virtues, thoughtful students of problem-oriented policing have worried that it has been too hard to sustain in practice. The most prominent early example of an agency that made a sustained, organization-wide commitment to problem-oriented policing was the San Diego Police Department during the 1990s, but the leading study of that experience found that

officers usually conducted superficial analyses that led to unimaginative responses, and even those who supported problem-solving reported a sense of "fatigue" after many years carrying it out (Cordner and Biebel 2005: 163). Police leaders and analysts have described the practice of problem-oriented policing as "precarious" (Sidebottom *et. al.* 2020), as a "one-off' response to specific problems" (Weisburd *et. al.* 2020), as "episodic rather than systematic" (Goldstein 2018: 3), as neither "deep or sophisticated" (Tilley and Scott 2012: 125), and in general as a pale shadow of the original vision that Goldstein first advanced in 1979 (Braga and Weisburd 2019; Goldstein 2003; Read and Tilley 2000; Clarke 1998).

The challenges that problem-oriented policing has encountered have evoked two main responses. The first calls for better management: police leaders and scholars need to pay closer attention to the barriers that have prevented police agencies from implementing problem-oriented policing successfully and to devise new strategies to overcome them (Townsley, Johnson, and Pease 2003; Boba and Crank 2008; Bullock et. al. forthcoming). From this perspective, the field should remain committed the vision of policing embraced by agencies like San Diego's but take further steps to institutionalize it (for example, by providing officers with clearer and more consistent guidance, support, and encouragement for problem-solving). The second response calls for lowered ambitions: the grandest hopes for Goldstein's model may be neither realistic nor necessary; police should settle for "shallow" problem-solving, especially targeted enforcement at high-risk times and places, perhaps supplemented by intermittent collaborations between police managers, crime analysts, and academic researchers (e.g. Cordner and Biebel 2005: 177-8; Braga and Weisburd 2019: 198). From this perspective, the ambitious efforts to make problem-oriented policing an agencywide commitment that emerged in the 1980s and 1990s in agencies like San Diego's may have been a wrong turn.

These responses miss something important. Continued efforts to refine the organizational infrastructure to support problem-oriented policing are clearly valuable (e.g. Sidebottom et. al. 2020; Boba and Crank 2008), but after more than 40 years of uneven success institutionalizing it, we should consider whether the dominant understanding of what it involves is really viable. That sense, indeed, is what has prompted the second response to the challenges that problem-oriented policing has encountered—the suggestion that we should replace Goldstein's most ambitious ideals with something more modest—but that response sacrifices too much. The greatest promise of problem-oriented policing in the current moment is the promise of a strategy of police reform that takes crime and safety seriously while remaining committed to fair and restrained use of police authority, the rule of law, and a broad understanding of community well-being (Borrion et. al. 2020; Thacher 2016; Scott 2000: 129). Street-level problem-solving that relies on traditional tactics like focused enforcement in high-crime locations, perhaps supplemented by modest changes to the physical environment, does too little to advance that crucial agenda even if it has a measurable impact on crime rates. Focused enforcement and changes to the physical environment can, of course, be significant interventions; but any agenda that accepts a fixed set of tactics and a conventional view of police goals abandons Goldstein's most significant ideal that police organizations should continually question the way they define and carry out their work, particularly by striving to find new ways to use criminal justice authority more sparingly than they have in the past (Goldstein 1977: ch. 4, 1990: ch. 8).

This paper develops a distinctive interpretation of problem-oriented policing that is engaged with these concerns. It acknowledges the need to reconsider our prevailing understanding of what problem-oriented policing involves, but it rejects calls to lower the ambitions underlying Goldstein's original vision. It builds on an important interpretation of

problem-oriented policing advanced by legal scholars (Dorf and Sabel 1998: 327-32) that has been largely ignored in the policing literature. That alternative interpretation understands (one form of) problem-oriented policing as an example of post-bureaucratic organization—a form of organization that treats organizational routines not as rigid scripts that tell workers what to do but as tentative guidelines subject to continual revision. I will argue that this interpretation better captures the spirit of Goldstein's original critique of police administration than the one that has dominated policing scholarship since then, and it better captures many of the most promising examples of problem-oriented policing that have garnered international attention. I make this case by scrutinizing the literature and practice of problem-oriented policing (illustrated especially by projects submitted for consideration for the Herman Goldstein awards and other celebrated problem-solving projects), aiming to reinterpret the best examples of problemoriented policing as part of an effort to build a new, more flexible form of organization that continually adapts policing practices to changing contexts and community priorities. That approach to problem-oriented policing embeds routine problem-solving in a more realistic organizational framework than the one that has dominated the field to date, yet one that ambitiously strives to continually reform needlessly harmful and ineffective policing practices.

In this respect, this paper aims to provide an interpretive (rather than explanatory or predictive) analysis of problem-oriented policing. In particular, I aim to develop the kind of normative interpretation advocated by Charles Taylor (1985: 15-57, 91-115)—an interpretation that tries to make the best possible sense of the ideas and practices developed by the advocates of problem-oriented policing. In the process, I inevitably challenge those ideas and practices in some respects by probing the contradictions, gaps, and unrecognized possibilities they contain.

As Taylor insists, a good interpretation tries to clarify the meaning of some practice, but that task

is necessarily critical; an account that simply restated what the participants already think they are doing would fail to make their practices any clearer (Taylor 1985: 16, 27).

Two Alternatives to Bureaucracy

Goldstein introduced problem-oriented policing with the metaphor of a bus system that had lost sight of its reason for being. Drivers repeatedly sped past long lines of bewildered passengers without stopping, and when a reporter asked a bus official why, the spokesperson explained that "it is impossible for the drivers to keep their timetable if they have to stop for passengers" (Goldstein 1979: 236). Goldstein used this anecdote to illustrate the means-overends syndrome that plagues so many bureaucracies (Merton 1940)—the common pattern of "becoming so preoccupied with running their organizations and getting so involved in their methods of operating that they lose sight of the primary purposes for which they were created" (Goldstein 1979: 236-7). He argued that this syndrome lay at the root of the malaise in policing at the time he wrote, when rigid commitments to existing practices led police departments to press forward with strategies that were ineffective or worse: Thoughtless use of arrest, decoy operations that tempted more people to break the law, pointless commitment to rapid response, obsession with administrative niceties, blind adherence to ineffective tactics, and so on. Problemoriented policing implored police to question the wisdom of their prevailing practices and search for better ways to do their work—ways that would promote public safety more effectively, make less intensive and more principled use of police authority, and honor other values essential to a free society.

In the story of the dysfunctional bus system, it helps to distinguish two alternatives to the status quo. When a bus driver finds that it will disrupt his timetable if he stops to pick up passengers, he might simply ignore the timetable. A bus schedule should help people ride the

bus, the driver might reason, and when it interferes with that goal it should be discarded. But if the driver repeatedly finds it impossible to meet his timetable, he might also alert his supervisors that the schedule is unrealistic and needs revision. Disregarding the schedule is surely better than ignoring the passengers, but it has its own downsides (now the passengers at the next stop have to wait in the cold for the delayed bus, and the passengers a few stops down the line may give up entirely). Perhaps whoever wrote this useless schedule needs some honest feedback about how badly it works in practice.

Charles Sabel has drawn a distinction that helps to understand these two different possibilities. Like Goldstein, Sabel tried to characterize alternatives to the rule-bound bureaucracies that have proven so dysfunctional. The most common alternative is an informal organization where front-line workers exercise discretion to accomplish complex tasks largely outside the guidance and constraint of existing organizational routines. Because the standard operating procedures in many bureaucracies are too rigid to cope with the complex and constantly changing tasks that front-line workers must perform, the workers need wide discretion to improvise (cf. Lipsky 2010). The result is a kind of "institutionally acknowledged informalism" or "organized informality" that encourages workers to set aside organizational rules and routines to make on-the-spot judgments about what needs to be done, guided by a "craft ethos" and "professional commitments" (Sabel 2006: 114-9). Bureaucracies sometimes endorse this kind of improvisation explicitly by demarcating certain areas of work that are only lightly governed by rules, empowering workers to exercise broad discretion to resolve complex and constantly changing problems. Alternatively, they may surreptitiously tolerate departures from the rules when workers decide it is necessary (at least until some scandal prompts a crackdown). In these ways, rule-bound organizations sustain themselves in the face of complex

problems by tolerating the continued existence of their informal twin at the margins of routine operations.

The second alternative to rule-bound bureaucracies is what Sabel calls a "pragmatist organization", which does not reject rules and routines so much as it rethinks their function (2006: 121-3). Pragmatist organizations encourage front-line workers to treat organizational routines as corrigible, recognizing that they may become counterproductive in unanticipated circumstances and, when that happens, should be revised. Workers may depart from the prescribed routines when unexpected circumstances arise, but they must alert others that they have done so and explain their rationale; the departure prompts a review that may lead the organization to revise its routines going forward (Sabel and Zeitlin 2012: 174). A classic example of this approach is the influential Toyota production system, in which workers are instructed *not* to improvise ad hoc fixes when unexpected problems arise but to halt production, alert others, and immediately work collaboratively with them to revise the system. The "Andon cord" hanging in each plant symbolizes this approach: By pulling the cord, workers stop the assembly line and summon a team of supervisors and specialists to consult with them to evaluate and resolve the problem (Liker 2004). In this way the Toyota system aims "to treat every problem as an occasion for re-assessing and reforming the system", since it is a "signal that the system is not as well designed as it could be" (Simon 2012; cf. Syed 2015). Instead of providing workers with broad discretion and encouraging them to improvise to overcome the limitations of

¹ The ungainly language of "pragmatist" organization derives from the American pragmatist philosopher John Dewey, who emphasized the role of malleable habits in human action and the role of distributed social intelligence in reforming them (Dewey 1922).

their organization's routines, organizations like these establish error-detection routines (like pulling the Andon cord) to continually identify those limitations so they can be rectified.²

Varieties of Problem-Oriented Policing

The distinction between organized informality and pragmatist organization suggests a distinction between two types of problem-oriented policing. The first responds to a novel public safety problem by setting aside the usual policing routines and improvising a novel solution, leaving the routines themselves unchanged. The second revises the routines so they can more successfully manage not just the problem at hand but similar problems that arise in the future. I

² I will elaborate on this brief sketch below, but to situate these ideas it may be useful to note that policing scholars have recently drawn on one version of them to develop strategies for reducing unnecessary use of force and other policing errors (Doyle 2012; Shane 2013; Pickering and Klinger 2016; Hollway, Lee, and Smoot 2017; Schwartz 2018; Thacher 2020). Those strategies draw on ideas about "organizational accidents", "root cause analysis", and "high-reliability organizations" used in fields like aviation and medicine to reduce errors. For example, hospitals have reduced deaths due to medication errors and surgical procedures by closely studying fatalities in the health care system and searching for ways to improve the systems and routines that may have contributed to them (for example, by pre-dosing medications, redesigning confusing machines, and revising expected operating room procedures) (Kenney 2008); similarly, airlines have all but eliminated plane crashes by encouraging pilots and others to notice and report potentially dangerous situations and then intensively studying both these "near miss" experiences and actual crashes in search of weaknesses in existing flight routines (Syed 2015). Recognizing the analogies between these fields and policing, a number of scholars have suggested that police agencies should similarly engage in relentless self-scrutiny to spot and rectify dysfunctional practices that contribute to avoidable use of force, wrongful arrests, and other troubling outcomes (Doyle 2012; Hollway, Lee, and Smoot 2017; Schwartz 2018; Thacher 2020). I discuss the connection between this approach to use-of-force review and problem-oriented policing in Thacher (2022).

will refer to the first as "coping problem-solving" and the second as "strategic problem-solving".³

In an influential essay published nearly 25 years ago, Ronald Clarke provided a clear example of coping problem-solving:

Imagine a situation in which a confused, lonely, old man has been making calls to the police department almost daily for a variety of concerns. In reality, he might be calling just to have someone to talk to. Imagine further that the officer assigned to the neighborhood in which the man lives persuades the man's family to find him professional care and that, as a result, the man stops calling the police (1998: 316-7).

Clarke argued that this effort, though praiseworthy, should not qualify as a problem-oriented policing because of its limited scope. He contrasted this "beat-level" project with a more ambitious, agencywide alternative that would have analyzed whether "older citizens who lived alone were generating a significant portion of the total number of calls for service" and then studied the sources of that problem to devise an agencywide response.

Like other students of problem-oriented policing, Clarke focused on the geographic scale and analytic complexity of the problem-solving efforts he considered, but it is helpful to frame their limitations in a different way. In Clarke's example, the officer resolves the problem at hand but otherwise leaves his organization unchanged, vulnerable to the demands of the next lonely

³ I thank an anonymous reviewer for suggesting these labels. While we are down here, I should also acknowledge that the language of "problem-*solving*" is potentially misleading. Goldstein himself largely avoided that term because he recognized that the difficult problems police encountered could rarely be "solved", only mitigated (Goldstein 1990: 36). The term has, however, become conventional in the literature, and I do not know of a graceful alternative.

old man who overuses 911. That approach exemplifies Sabel's "organized informality": recognizing that existing routines (here, automatic 911 call response) produce an absurd result, an officer or team of officers creatively improvises a solution, deploying a variety of tools beyond their usual portfolio to alleviate the problem. The officers may not necessarily need to violate organizational rules to implement their solution, but they are operating outside of their organization's routines. Their efforts may succeed in resolving the problem in the short term, but the success is often temporary, even among the most sophisticated projects (Scott and Clarke 2020: 5-6). If the problem recurs, another officer or group of officers will need to recognize it and devise a solution once again.

Two decades after Clarke imagined the lonely old man who called the police too often, a finalist for the Herman Goldstein award targeted a more general version of the same problem (Lancashire Constabulary 2017). The Lancashire Vulnerable Callers Project focused on troubled individuals who frequently called the police, such as one severely isolated man who had made 94 unnecessary calls a month and an elderly homeless man struggling with substance use who repeatedly called to express suicidal or violent thoughts or to contest an ongoing domestic violence case against him. The Vulnerable Callers Project assigned an analyst at the Constabulary's headquarters to identify the individuals who called the police emergency and nonemergency numbers most frequently and then manually evaluate those who qualified as "vulnerable" (about half the total; see Keay and Kirby 2018 for the definition of "vulnerable"). The agency documented each of these callers on a form the Project had developed, and it appointed a Lead Professional from either the police department or an area social service agency to develop an intervention plan in collaboration with the caller, any family members, and other sources of social support. The plans varied in complexity, from posting a note by the caller's

telephone reminding them who to contact when they felt distressed; to providing the caller with a referral to mental health, drug, or alcohol treatment services; to helping the caller move to a supported housing facility. In addition, all future calls from members of this group would be flagged in the police call center, so the call taker could immediately access the caller's response plan. In some cases, the call taker could use the response plan to help resolve the caller's problem on the phone; in others, the call taker could refer the caller to an alternative responder designated in the intervention plan. The Lead Professional assigned to each caller met monthly with supervisors to revisit the plan and review recent experiences. The headquarters analyst continually updated the list of vulnerable callers as a permanent part of the job.

The Lancashire project illustrates how a police department can restructure failing organizational routines rather than bypassing them. Confronted with a man who called police nearly 100 times in a single month for no justifiable reason, the routine of sending an officer to respond to every call from the public led to absurd and frustrating results. The Lancashire Constabulary therefore revised and augmented its call response protocol, periodically identifying many of the highest-rate callers for distinct treatment—a tailored response by the call center during future calls, as well as a tailored service intervention designed to prevent some calls.

The difference between this effort and Clarke's hypothetical example is partly a matter of scale (the Vulnerable Callers Project focused on many high-rate callers, whereas Clarke's officer focused only on one), but a more important difference involves organizational change: the former but not the latter altered existing organizational routines, replacing the uniform response to every call for service with a differentiated response to vulnerable callers who have overused that system. In addition, the Constabulary augmented its call response routine with relevant service interventions (ranging from a post-it-note reminder to relocation to supported housing)

designed to reduce that use; the development of those interventions was itself routinized. Where Clarke's officer resolved a problem by acting outside usual organizational routines, Lancashire's Constabulary resolved it by reforming them.

Many celebrated problem-oriented policing projects restructure organizational routines in a similar way. In High Point, North Carolina, the Intimate Partner Violence (IPV) initiative took shape as a complete revision of the usual routines for responding to domestic violence incidents. The project developed a four-part taxonomy of IPV offenders, analyzed police records to tentatively place each known IPV offender into one of the four categories, and developed guidelines about how officers and others should presumptively handle members of each category. In parallel to these new ways of responding to different categories of IPV offenders, police and service providers revised and supplemented their standard response to victims based on where their case fell into the taxonomy (Kennedy 2020a). For David Kennedy, who led the team that developed the High Point intervention, the goal was to dismantle the ineffective and unjust routines that police and others currently use to respond to domestic violence and replace them with a more promising approach—one that would simultaneously protect victims more effectively from future violence and reduce the burden placed on them to mobilize that protection (Kennedy 2020b). In place of an undifferentiated response to all IPV incidents that sent an officer with largely unstructured discretion to every incident to respond to it as best they could on the scene, the department disaggregated incidents according to a taxonomy of subgroups and provided the responding officers and others who would become involved later with detailed guidelines and new information sources relevant to each (Kennedy 2000a).

Other projects follow this basic model closely, including other efforts to improve the police response to domestic violence (Chula Vista Police Department 2018), a project that

replaced routine arrests for minor offenses with a deferred prosecution diversion effort (Durham Constabulary 2019), and an initiative that aimed to combat vehicle theft by developing a fourpart taxonomy for police to follow in handling youth involved in that offense (Linden 2020). All of these projects refine the routines that police officers and others will follow when they respond to recurrent types of incidents by developing guidelines governing the way they use their discretion.

These examples all modify the police department's own routines, but other projects modify the routines of other organizations. In Houston, an analysis of convenience store robberies found that the problem was heavily concentrated in a small number of stores that had never embraced useful crime prevention practices, such as drop safes, anti-loitering measures, staff training in safe cash handling practices, and unobstructed windows and doors. Police tried to educate store owners about these and other anti-robbery measures to encourage them to adopt those measures voluntarily; they also convinced city council and the mayor to enact new regulations that would require them. The police department soon established a special unit to inspect stores routinely for compliance with the new regulations and issue warnings when they found violations (LaVigne and Erondu 2020). In this case, the primary organizational routines that changed were those of the convenience stores, which had to permanently alter their staff training, cash-handling procedures, and physical design choices. Police altered their own routines mainly to catalyze and sustain those primary changes. Many other problem-oriented policing efforts aim to improve public safety by effecting a durable change in the routines of organizations other than the police, including projects targeting shoplifting in big box stores (Arlington Police Department 2016), crime and disorder in budget motels (Bichler and

Schmerler 2020), violence at supported housing facilities (Durham Constabulary 2018), and suicides on the British rail system (British Transport Police 2018).

Projects like these that permanently alter organizational routines (either inside or outside the police department) contrast with projects that set existing routines aside to improvise a solution to a specific problem. Clarke's example of the officer who connected a repeat caller with social services report illustrates that improvisational approach, but many other problemoriented policing projects take that form. Faced with a neighborhood plagued by chronic crime or disorder, police may assemble a creative response: They may enlist service providers to reach out to the people involved, prevail upon party stores to stop selling cheap malt liquor, enlist public works officials to modify an area's physical environment, prevail upon code enforcement officials to condemn a vacant property, or enlist patrol officers or staff from other units to the neighborhood to take decisive action. In these familiar interventions, the police department may reallocate officers to a problem area or get those who already work there to take unconventional actions to resolve the problem, but police leaders do not ask the further question of why existing practices have failed to resolve the area's problems without this kind of extraordinary departure from business as usual. Similarly, police may take extra steps to successfully convince regulators to crack down on a problem bar, convenience store, or housing complex that they had been ignoring, but they may fail to investigate why the regulators, bars, and others had not already identified and resolved those problems on their own—what it is about their existing routines that made them overlook this problem for so long, and how those routines should be altered to prevent a recurrence. That additional work is what distinguish strategic problem-solving from coping problem-solving.

Sometimes these further steps may be unnecessary or too difficult. Some problems are so idiosyncratic that improvisational action is entirely appropriate, and it may make no sense to codify the results in new routines; sometimes it would be too expensive or controversial to take that further step. In these cases, the failure to institutionalize changes is not an oversight but a reasoned judgment (e.g. Boba and Crank 2008: 390). My point is not that it is always desirable to routinize the results of problem solving but that it is sometimes possible, and that projects that take that step comprise a distinct type of problem-oriented policing.

Some Virtues of Pragmatist Organization

I have suggested that some problem-solving efforts are best understood as attempts to restructure organizational routines (strategic problem-solving), rather than bypass those routines to improvise a unique solution (coping problem-solving). The first approach has several potential advantages. Everything else being equal, there is obvious value in problem-solving efforts that result not only in a solved problem but in a better organization—one that has improved the routines that workers will follow when they encounter similar problems in the future. Such efforts also advance Goldstein's own hope that problem-oriented policing can help to refine the police institution (Goldstein 2018: 3 ff.). Beyond these obvious virtues, this section will argue that strategic problem-solving also has less obvious advantages: it helps to discipline problem-solving inquiry in a way that makes it more tractable, and it contributes to learning and accountability by making problem-solving more transparent to managers and stakeholders. A discussion of these virtues will help to clarify several distinctive features of this form of problem-oriented policing.

Routines, Discretion, and Bounded Rationality

As Herbert Simon argued years ago, human beings lack the cognitive capacity to solve every problem they encounter from scratch: most of the time, we rely on habits and rules of thumb to

decide what to do in difficult situations. Traditionally, organizations try to turn this habit-bound character of human nature into a virtue, accepting and even encouraging workers to follow routines while trying to ensure that they have been carefully designed and tested (Sabel 2006: 111-2). The problem, of course, is that even the best-crafted routines often fail in a complex and constantly changing world, and an overly rigid commitment to them can undermine organizational effectiveness (Merton 1940).

Organized informalities and pragmatist organizations represent two different approaches to this basic problem. The first set routines aside and encourage workers to craft a new response tailored to each problem they encounter. Although that approach may succeed in some contexts, it sidesteps the problem that formal organizations are designed to solve in the first place: given the limits of human cognitive abilities, it is exhausting and ultimately unrealistic for workers to try to solve every problem from scratch. That pattern clearly arises in policing, where the most ambitious problem-oriented policing initiatives have proven difficult to difficult to sustain: officers generally fall back on weak analyses and familiar responses rather than taking a truly open-ended and comprehensive search for new solutions (Clarke 1998; Cordner and Biebel 2005; Braga and Weisburg 2019; Bullock et. al. forthcoming). This tendency to revert to familiar approaches is sometimes attributed to the nature of police work or police culture (e.g. Townsley, Johnson, and Pease 2003: 190), but Simon's analysis suggests that it is not unique to policing. Like everyone else—including the most skillful craftsmen—police officers cannot fully escape their habits, and when their bosses routinely ask them to do so they may simply relabel their customary tactics with new names and justifications. Perhaps a largely routinized pattern of police work punctuated by occasional creative improvisation in exceptional cases is feasible, but

any expectation that officers should continually tailor new solutions to unique problems may be unrealistic.⁴

Pragmatist organizations take a different tack, rethinking the nature of routines rather than simply rejecting them.⁵ If bureaucracies treat routines as enduring scripts, pragmatist organizations treat them as provisional guidelines. The guidelines do not leave workers with unbounded discretion—among other things, they tentatively rule some actions out, establish a finite menu of alternatives to choose from, articulate standards that provisionally need to be met, and identify partners whose cooperation may be useful—but they leave flexibility for different workers to enact them in different ways. Like bureaucratic rules, such guidelines help individual workers overcome their own cognitive limitations by distilling the lessons that others have learned in the past (options that have proven valuable in similar circumstances, considerations

⁴ Despite the difficulty of meeting that expectation, the policing literature has frequently embraced it. At the height of the enthusiasm for problem-oriented policing in the United States, Mark Moore and his coauthors wrote: "The notion that policing is the routine application of policies and procedures must be discarded. It needs to be replaced with the idea that policing requires invention and improvisation as officers encounter new situations and problems. The image must be abandoned of policing as a 'production line' for which a few engineers have designed processes that can be used over and over again to produce a consistent result. It needs to be reconfigured with the image of a 'job shop' in which each police assignment is treated as a new challenge that might require a new solution" (Moore, Sparrow, and Spelman 1997: 294). Several years later, Clarke and Eck echoed this view: "Conventional policing is too narrowly based and inflexible. It operates too much like a factory production line making a standard product rather than like a professional service that tailors its product to the particular needs of clients. Problem-oriented policing supplies police with a method of responding to the diverse nature of crime problems" (2003: §4).

⁵ The nature of pragmatist routines is a complex topic that I can only touch on here. See especially Dewey (1922); cf. also Sabel (2006); Simon (2012); Cohen (2007). What follows synthesizes ideas from all these sources.

that have proven relevant in evaluating those options, courses of action that have proven disastrous, and so on), but they leave more flexibility to cope with complex and varying circumstances—for example, by specifying options rather than solutions (Thacher 2020: 760-3).

Equally important, the guidelines are merely provisional, subject to revision at any time as long as the revisions are made openly. In normal times, the organization relies on relatively stable routines that help workers manage the problems they typically encounter, but when unusual or novel circumstances arise, it mobilizes the workers and other stakeholders to consider whether and how the routine should be modified. Any modifications that result from this process are just that—refinements of existing practices rather than unprecedented inventions—so they do not make the same, potentially intractable cognitive demands that unguided improvisation does. The task is not to ask how a problem should be solved *de novo* but to ask why current approaches are failing and how they might be modified to become more successful.

Often, the modifications take their inspiration from the unique approaches that exceptionally successful workers have already taken. Individuals are not expected to resolve unusual problems on their own; in effect, they can enlist the rest of the organization in their search for ways to modify a failing practice. In that respect, the two distinctive features of pragmatist routines—flexibility and corrigibility—are interconnected: flexible guidelines leave at least some room for experimentation, which in turn provides an important resource for continual improvement when existing routines need to be modified.

Pragmatist Routines in Problem-Oriented Policing

The theory and practice of problem-oriented policing often follows this picture closely. The idea that guidelines provide an important focus for learning and change was central to Goldstein's work on police discretion in the years before his first article about problem-oriented policing. In that work, Goldstein worried that most police departments essentially left officers to

their own devices when they confronted complex situations, with troubling results for both effectiveness and accountability (Goldstein 1963). By formulating guidelines, he argued, police departments could shape, support, and oversee front-line police work more effectively (Goldstein 1966). To develop such guidelines, he suggested that police departments should begin by documenting how officers currently used their broad discretion and codifying the approaches that could withstand scrutiny (Goldstein 1966: 1132-3; 1977: 117).

As he shifted his attention from guidelines to problem-oriented policing, Goldstein retained this basic picture, indicating that problem-solving needed to study existing practice carefully—both to understand why and in what respects current responses are inadequate *and* to fuel the search for alternatives. This step rarely receives detailed attention in contemporary accounts of problem-solving (e.g. Clarke and Eck 2016), but Goldstein insisted on its importance (Goldstein 1979: 248-9; 1990: 42-3, 94-8).

The effort to document current practices contributes to problem-solving in two important ways. First, it simplifies the task of developing an appropriate response: the task is not to invent an entirely new practice but to refine one that already exists—to add specific steps to existing routines, disaggregate broad incident categories into more specific subcategories, rule out some of the alternatives that are currently being used, ensure that commonly neglected duties will be performed, and so on. That approach is valuable because it is easier to revise an existing script than to write a new one.

Second, careful study of existing responses can provide a source of new ideas, unearthing the range of different tactics that the agency's own officers and members of the local community

⁶ For two of the most fully developed examples of guidelines in policing, developed explicitly within a Problem-oriented policing framework, see Kelling (1999) and Kelling and Coles (1997).

have used to cope with recurrent problems. Some officers may have developed unusually effective and humane ways of handling a problem, and an effort to document their efforts "has the potential for making routine what was exceptional" (Goldstein 1990: 95, quoting Egon Bittner; cf Goldstein 1979: 249).

By tapping into these innovations that its own officers have developed, problem-solving mobilizes a distinctive type of expertise and inquiry. The engine of knowledge and innovation does not lie mainly in outside expertise (for example, academic knowledge) but in expertise accumulated locally through practical experimentation by the agency's own staff and others involved in managing local problems in the local environment. Problem-solvers do not need to invent novel solutions from scratch, police officers do not need to master the criminological literature, and criminologists do not need to identify generalizable solutions to every idiosyncratic problem in any conceivable context. The agency's own distributed knowledge and practical experimentation in the local context provides the main input into problem solving.

That approach may be better-suited to the nature of the problem-solving enterprise than one that treats it as a form of applied criminology. The problems that police contend with and the resources available to them vary dramatically from one context to another, so there are few generic interventions that can reliably resolve those problems (Thacher 2019; Sparrow 2016: ch. 4). Success depends more on crafting a "best fit" for the local context than on adopting generic "best practices" identified by outside experts (cf. de Angelis, Rosenthal, and Buchner 2016: 52; Thacher 2008). An approach to problem-solving that systematically harnesses local experimentation is well-designed to craft solutions that are tailored to the local context in that way.

A skeptic might still worry that this approach will be too timid, in that it cannot fundamentally challenge existing practices. In fact, however, it has produced many of the most innovative problem-oriented policing projects of the past four decades, including the Boston Gun Project (whose influential focused deterrence model adapted an approach taken by a small youth violence unit that had used it in one Dorchester neighborhood) (Kennedy 2011: 34ff.) and the successful effort to reduce disorder on the New York City Subway system in the 1990s (which generalized the approach that one particularly successful transit police captain had developed with his officers) (Kelling and Coles 1997: 122-3).

Routines, Accountability, and Learning

In the model of organized informality, front-line workers can improvise new solutions to complex and novel problems, but by definition those solutions cannot be described in terms of existing organizational categories. That makes them relatively invisible to the rest of the organization: it is hard for managers and stakeholders to monitor them and for other officers to learn from them. By contrast, pragmatist organizations make unusual ways of using discretion transparent by insisting that they must be brought to the attention to coworkers and managers and reconciled with existing organizational routines. Consider again Toyota's paradigmatic production systems: instead of silently improvising a solution to an unexpected problem, workers must stop production and summon their team to deliberate about the nature of the problem and how (if at all) the existing routines should be modified to resolve it.

This same contrast applies to the two forms of problem-oriented policing distinguished earlier. For example, Clarke's officer (who consulted with a man's family to find social service providers who somehow helped him stop calling the police) solved an informally identified problem with little oversight, relying on his own judgments about the kind of solution that would be appropriate; if other officers learn about his solution at all, they will do so informally and

accidentally. By contrast, the Vulnerable Callers Project had to establish explicit criteria for classifying particular callers as "problems", and it explicitly articulated the responsibilities owed to them by various categories of people (including call takers, Lead Professionals, family members, service providers, and responding officers). The solutions it devised were formally promulgated throughout the agency.

The additional work taken on by projects like the Vulnerable Caller's Project hardly seems like a virtue, since those projects sacrifice the agility of improvisational action for the challenges of bureaucratic wrangling. Any attempt to avoid those challenges, however, may bring its own problems, restricting the scope of the solutions that problem-solving can implement and undermining their democratic legitimacy.

Many close students of problem-oriented policing have worried that the scope of the problems that police have tackled has usually been too modest (e.g. Boba and Crank 2008: 382-3). Line officers usually shoulder most of the responsibility for problem-solving, but they lack the authority needed to resolve problems that extend beyond their own beats or that require means outside their control (e.g. Scott and Clarke 2020: 61). William Bratton famously objected to the NYPD's hopes for problem-oriented policing for this reason: since patrol officers had little authority to implement genuinely new strategies, they were being set up to fail (Braga and Weisburd 2019: 198). This concern about the limits of line officers' authority is valid, but that does not mean that it is naïve to expect ambitious problem-solving: it means that police managers who take problem-oriented policing seriously need to cultivate a structured process for modifying organizational routines. The move from Clarke's beat-level problem solving around one repeat caller to the Lancashire Constabulary's Vulnerable Caller's Project is a move from discretionary action by a line officer within the confines of the existing organizational routines to

collaborative organizational reform. In that collaborative approach, a line officer may (indeed often does) nominate a problem based on the insights gained from front-line work about the perverse consequences of existing routines, but no one should expect that officer to solve the problem on their own. Instead, the officer should enlist help from managers and others inside and outside their own organization whose routines are implicated in the problem they have identified, just like the factory worker in a Toyota assembly line who pulled the Andon cord.

When an organization does not accommodate this predictable need for collaborative change, officers may still improvise solutions to the problems they discover, but they may do so in a way that sacrifices accountability and consistency. Two years before he first articulated the idea of problem-oriented policing, Goldstein noted how the pressure to resolve recurrent problems often led officers to devise creative but troubling solutions; most important, they often developed those solutions in the shadows, without anyone in the agency's leadership knowing what they were doing. When community members complained about police practices to the chief, the chief denied that any such practices were being used, with predictable consequences for organizational credibility (Goldstein 1977: 105-6). Similarly, George Kelling and Catherine Coles once described how cities often respond to complaints about "the homeless":

The mayor calls the chief of police and says: "Bums are bothering secretaries in the park at lunch. Don't do anything illegal, but get them out of there." The chief calls in the deputy chief and starts the order down the line. . . The message gets to the patrol officers responsible for the park. They understand the real message. "Do what you have to do and cover your ass" (Kelling and Coles 1997: 121).

The alternative, which Kelling and Coles illustrate at length, is to engage a wide range of police officials and other stakeholders in a transparent dialogue about the nature of the problem and

possible solutions, including appropriate behavioral rules, enforcement tactics, and prevention strategies that will become routine practices going forward (*Ibid.* 114-37). The proposed solutions can and should be debated publicly, tested in the courts, and officially endorsed by police leadership (*Ibid.* 121-4).

Conclusion

It is unrealistic and even dangerous to expect police officers to regularly devise innovative solutions to the recurrent problems they encounter. Everyone, not just police officers, usually needs to rely on the guidance and constraint their organizations provide them. The guidance provides the benefit of the knowledge accumulated by many other people who have confronted similar problems, and the constraint provides insights into the expectations of the stakeholders their actions may affect.

The central danger that Goldstein called attention to, and that problem-oriented policing aims to overcome, is that the guidance and constraint will become too rigid, preventing officers from coping with the complex and constantly changing landscape of problems we expect them to contend with. That is what the means-over-ends syndrome is about. Left unchecked, the result is a police organization that may be simultaneously ineffective and overbearing, reflexively committed to destructive practices that fail to alleviate real public safety concerns.

I have argued that the best response to that danger is not to set aside the organizational routines that guide and constrain police officers in the field but to routinize the practice of questioning them, embracing the model of pragmatist organization rather than the model of organized informality. That pragmatist model treats "recurrent problems" as signals that existing organizational routines are failing (just as the bus schedule that Goldstein described in 1979 was failing). It does not necessarily encourage the front-line police officers who identify those

failures to resolve the problem themselves. The Toyota production system that exemplifies pragmatist organization actively discouraged ad hoc fixes on its production line: instead, it instructed workers who came across a problem to summon others to the scene to diagnose what has gone wrong. That approach forces the organization to confront the weaknesses of its existing routines, rather than conceal them with creative improvisation. When Clarke's officer devised an improvised solution to the lonely old man who kept calling the police, he resolved an immediate problem, but he did so in a way that deprived the organization of a chance to discover an important weakness of its current routines. By contrast, the Lancashire Constabulary did more than solve a specific problem: it identified a continuing weakness of a system that provides unquestioned and largely standardized response to every emergency call the agency receives. To do that, of course, it had to enlist a much broader range of collaborators than Clarke's officer did, and in that respect its approach to problem-solving is necessarily limited in scope: organizations cannot constantly question every routine they rely on, so strategic problem-solving will be relatively infrequent compared with coping problem-solving. But if problem-oriented policing needs to prune its ambitions—as the accumulating evidence that constant problem-solving is unsustainable suggests it does—then this kind of pruning better preserves Goldstein's core ideal than other alternatives that have been recently proposed (notably those described in the introduction).

This interpretation of problem-oriented policing has important implications for how police agencies should carry Goldstein's model out. As discussed at length above, it has important implications for the process of analysis. Because strategic problem-solving is a form of organizational self-scrutiny, it begins with a careful investigation of existing responses to the problem at hand (for example, how officers typically respond to domestic violence calls right

now, and whether some officers have devised particularly noteworthy ways of responding). Goldstein himself repeatedly insisted on the importance of that step, but it is often neglected in contemporary problem-solving guides. Strategic problem-solving also has implications for the kind of response that projects should aspire to. It requires more than immediate actions to alleviate a discrete problem; problem-solvers should also ask how their organization's standard practices should be revised going forward (for example, what routine practices the call center should implement to identify manage the subset of callers who will inevitably overuse it). Finally, strategic problem-solving cannot remain as the responsibility of officers on the beat. It is inherently a collaborative process—one where beat officers contribute their own insights about the limits of existing practices and some of the possibilities for reform, but managers and other stakeholders (including stakeholders outside the police agency) contribute their perspective about the broader rationale for those practices and, when necessary, their authority to reform them.

Although this paper has stressed the virtues of strategic problem-solving, I do not mean to imply that coping problem-solving has no place in policing. To repeat a point made earlier: some problems are so idiosyncratic that it makes no sense to codify an innovative response in new routines, and sometimes the costs of codifying those responses are too high to justify the benefits; sometimes fleeting improvisation is exactly what is needed. Moreover, by allowing and encouraging coping problem-solving in appropriate circumstances, police agencies may add to the stock of experimentation that strategic problem-solving requires. Informal efforts to resolve novel problems become part of the agency's experience that future efforts at strategic problem-solving can exploit. From this perspective, coping problem-solving projects might be viewed as trial runs for strategic problem-solving. For all these reasons, coping problem-solving is a valuable part of progressive policing; but an agency that *only* does coping problem-solving is

sacrificing the ability to make a long-term change in policing practices, since constant improvisation of this kind seems to be unsustainable.

Many contemporary police departments rely on too many practices that are both ineffective and destructive, yet they lack any systematic mechanism to identify and reform them. That failure arguably lies at the root of the crisis that has recently engulfed many police departments in the United States and elsewhere, and indeed the institution of policing more broadly. When the prevailing, undifferentiated, reactive response to domestic violence repeatedly ends in tragic failures to prevent victims from harm even as it burdens them with too much of the responsibility to mobilize their own protection, that response needs to be replaced with something else (Kennedy 2020b). When the prevailing way of responding to supportive housing facilities allows their dangerously unprepared staff to criminalize vulnerable residents, the police who are repeatedly called on to respond need to insist on a more exacting set of regulatory standards to govern those facilities (Durham Constabulary 2018). When the unquestioned promise of a police response to every trivial shoplifting call leads the biggest retail enterprise in the world to abdicate its own loss prevention responsibilities, that promise and those responsibilities need to be renegotiated (Zidar, Shafer, and Eck 2018). Too often, problemsolving projects have been content to bypass or work around failing practices like these, improvising ad hoc solutions rather than confronting entrenched dysfunction. The best examples of problem-oriented policing push beyond that limited horizon, establishing a valuable mechanism to identify and reform dysfunctional habits of police work and community security. By doing so, they provide a viable model for police reform relevant to the crisis of policing today—one that relentlessly searches for better ways of making communities safe while upholding values of a free society.

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