How the Public Became the Caller: The Emergence of Reactive Policing, 1880-1970

Forthcoming in Law and Social Inquiry

Authors

JESSICA W. GILLOOLY¹ | DAVID THACHER¹ ¹Department of Sociology and Criminal Justice, Suffolk University ¹Gerald R. Ford School of Public Policy and A. Alfred Taubman College of Architecture and Urban Planning, University of Michigan—Ann Arbor

Correspondence

Jessica W. Gillooly, Department of Sociology and Criminal Justice, Suffolk University 73 Tremont St, Boston, MA 02108 Email: jgillooly@suffolk.edu

Acknowledgements

The authors would like to thank Anthony Chen, Barry Friedman, Johann Koehler, Wesley Skogan, and Northwestern's Comparative Historical and Social Science Workshop for very helpful comments and feedback on an earlier draft of this article.

Biographical Statements

Jessica Gillooly is an Assistant Professor of Sociology and Criminal justice at Suffolk University. She can be contacted at jgillooly@suffolk.edu.

David Thacher is an Associate Professor of Public Policy and Urban Planning at the University of Michigan. He can be reached at dthacher@umich.edu.

Abstract

Why is the police role so broad in the United States today? Carceral state scholars have investigated how and why policymakers have treated so many social problems as policing problems, but they have not yet recognized the degree to which deliberate political control over police strategy has been marginalized by the call-for-service system. This article traces the historical sources of this arrangement through extensive archival research into its evolution. We find that over the course of the 20th century, the rise of new communications technologies gradually shifted the power to decide which problems are proper subjects of police attention to private individuals, eventually channeling their demands through centralized call centers that had been stripped of the authority and contextual knowledge needed to govern them in a meaningful way. That process fundamentally altered the character of public oversight over policing, elevating a distinctive set of individual interests as largely unchallenged determinants of the kinds of situations that are policeable. By illustrating how sociotechnical change unintentionally reallocated the authority to define the scope of an important institution's mandate, this case sheds new light on the factors that shape the police role and the role the public plays in defining it. Four days after a sniper killed five Dallas police officers in retaliation for the police killings of Alton Sterling and Philando Castile, police chief David Brown made an emotional plea about what he saw as the main source of the social unrest over policing:

We're asking cops to do too much in this country. We are. Every societal failure, we put it off on the cops to solve. Not enough mental health funding, let the cops handle it. ... Here in Dallas we got a loose dog problem; let's have the cops chase loose dogs. Schools fail, let's give it to the cops... That's too much to ask. Policing was never meant to solve all those problems (Dennis, Berman, and Izadi 2016).

Brown's words made headlines across the country, bringing nods of agreement from police and their critics alike, and they have been quoted repeatedly in academic analyses of the crisis in policing (*e.g.* Vitale 2017: 28, Friedman 2021: 931; Fulambarker 2020: 2), but it remains unclear in what sense "we" have "asked" the police to do too much.

For many historians and sociologists writing about the rise of the "carceral state" in the United States, the breadth of the police role is the result of deliberate choices that political leaders have made over the past several decades to assign a wide range of social problems to the police: Those leaders have passed laws that criminalize social problems like sex work and homelessness, they have adopted budgets that invest more heavily in policing than mental health, they have assigned police officers to schools and public housing, they have encouraged officers to enforce minor quality of life rules and use their stop-and-frisk authority more aggressively, they have established gang units that treat youth activity as delinquency, and they have waged a relentless war on drugs (*e.g.*, Vitale 2008, 2017; Justice Policy Institute 2011; Rios 2011; Agee 2013; Hinton 2016; Forman 2017; Felker-Kantor 2018; Balto 2019; Footer *et. al.* 2019; Hinton and Cook 2021; Brayne 2021; Lvovsky 2021). For some analysts, these choices reflect an overriding political program—"a neoconservative politics that sees all social problems as police problems," as Alex Vitale put it (2017: 27)—that emerged from the governance crises of a politically unsettled era (Simon 2007).

The explicit choices about policing strategy and political ideology that sociologists and historians have investigated have undoubtedly contributed to the breadth of the police role, but there is also a more direct sense in which "we" are "asking" the police to do too much: We as individuals call them every day and ask them to respond to a seemingly boundless set of problems-and they respond. Today, and for many years since at least the 1970s, anyone with a telephone can summon the police by dialing 911, and they do so quite often; roughly half of all police encounters are responsive to citizen requests, most of which originate from calls to 911 (Langton & Durose, 2011; Neusteter et al., 2020; Reiss, 1971). These requests can result in disastrous outcomes: more than half of all police shootings of unarmed civilians began with a 911 call (Selby, Singleton, and Flosi 2016), and several high-profile incidents illustrate how callers' biases have led to unjustifiable arrests and unwanted police contact (Takei, 2018). Call centers do little to screen or deflect the calls they receive: "When in doubt, send a car out" seems to be their motto, at least as a matter of unofficial policy (Gillooly 2020b). As a result, much of the distribution of police intervention today is not determined by explicit policy choices about where it is most warranted but by the unvetted and uncoordinated choices of private callers. As Chris Herring (2019) points out, although scholars typically depict police initiatives "as topdown, command-and control policing 'campaigns', engineered and directed by police chiefs", in fact most police work today is dictated by public complaints, particularly emergency 911 calls. As much as anything else, the emergence of that arrangement explains why the police role today is so broad.

In this paper, we argue that this profound shift in American policing was not itself a direct product of any intentional plan to expand the police role but an unintended byproduct of technological change; more specifically, it was the result of the particular way in which police

leaders and reformers integrated the telephone and the police radio into police operations during the middle decades of the 20th century. By assembling and analyzing a wide range of archival sources, including ethnographic records of mid-20th century policing that historians and sociologists have rarely studied, we reconstruct the key choices that American police departments made about the way they would use and adapt to new communications technologies that emerged in this era and analyze how they reshaped police work. We find that this process of change eventually forged a stable network of police leaders, callers, telephone operators, city officials, police officers, and others that reorganized lines of authority and influence over police mobilization (cf. Callon 1984, 1985, 1986). In particular, the telephone established the role of "caller", and police organizations eventually established specialized "call-takers" whose sole job was to field requests for police service from callers; neither role had existed in quite the same form in policing's past. The creation, placement, and definition of these roles reconfigured the relationship between the public and the police, establishing a protected channel between the caller and the responding police officer that was largely insulated from other organizational and social interests.

That development was important because it elevated the importance of the interests that individuals have in their capacity as callers—as people with suspicions, complaints, emergencies, and other personal desires for police intervention in particular situations (Bell 2016)—rather than their capacity as subjects of calls or as citizens concerned with fair and efficient use of public resources and authority. In that respect, the call-for-service system transformed the nature of the "public" that exercised authority over police mobilization: "the public" now meant "the caller", while other parties with an interest in what that person was asking the police to do were marginalized. As a result, police leadership and local political

debate increasingly lost control over the scope of the police mandate, as decisions about the kinds of problems that are appropriate subjects for police intervention were centralized in call centers that lacked the professional status, political power, and contextual knowledge needed to govern them in a meaningful way.

These findings make several contributions to the overlapping literatures on police history, criminology, and sociolegal studies. Most simply, they fill in an important gap in historical knowledge about the character and implications of a major change in American policing. Histories of the police have said little about the call-for-service system, ignoring it entirely or treating it as a black box that arrived on the scene fully formed. When they have considered its significance for policing, scholars have mostly emphasized its impact on police-community relations, noting how it replaced informal interactions with the general public with impersonal automobile patrols punctuated by contentious interactions during emergencies (e.g. Richardson 1974: 116-20; Uchida 2021: 25-6; Walker 1984: 80-1). These accounts rarely discuss the callfor-service system's implications for the scope of the police role or the character of public influence over policing. Samuel Walker made the most significant contribution when he suggested that communications technologies altered public expectations about what kind of disorder was intolerable by making it easier to contact the police (Walker 1979: 137; 1984: 81-2), but like other historians, he has not investigated the process by which those technologies became embedded in police organizations. That omission is significant, since sociologists of technology have demonstrated that it is not technologies *per se* that matter but the way they become integrated into a particular configuration of social, organizational, and technological elements (Orlikowski 2000, 2007; Latour 1994). By reconstructing that process, our analysis

enriches the field's understanding of the nature and implications of this profound change in American policing.

Second, by analyzing an important but largely neglected factor that has reshaped the police role in 20th century America, our analysis contributes not only to the emerging literature about that topic that we have already discussed, but also to a broader literature about the way the scope of the problems assigned to police institutions has been determined in other times and places (e.g., Koehler and Cheng 2023; Churchill 2017; Campesi 2016; Monkkonen 1981). Like the scholarship about the expansion of the police role in the U.S. discussed above, this broader literature often searches for sources of the police mandate in the decisions and ideas of police leaders, political elites, and theorists. Those decisions and ideas clearly matter, but to understand their full implications it is necessary to trace the way they reconfigured the network of roles and relationships in which policing practices are embedded; those structural changes, in turn, have significant (though often unintended) implications for the work that police ultimately do. By drawing on archival materials that have rarely been incorporated into policing history, we demonstrate the feasibility and value of that approach. Our approach builds on other studies that similarly stress the need to study practices, not just discourses, to understand the evolution of the police role (esp. Churchill 2017); in particular, we highlight how the sociotechnical systems that partially constitute policing have shaped the scope of the police mandate.

Finally, our analysis adds to a growing body of scholarship in legal sociology and criminology about the changing nature and challenges of "public" oversight in policing (*e.g.,* Cheng 2022, 2020; Rocha Beardall 2022; Sklansky 2008; Herbert 2006; Thacher 2001; Jones, Newburn, and Smith 1994). Much of that scholarship focuses on specialized mechanisms of public input into policing like neighborhood meetings and civilian complaint review boards; so

far, it has not considered how the public shapes policing through the call-for-service system. That system is significant not only because it exerts such a continual and pervasive influence over policing but also because of the distinctive *way* it constitutes "public" input. As we explain in more detail below, the call-for-service system fragmented public influence over policing in at least two ways. First, it directed public influence narrowly to questions about the specific times and places where individual police officers should intervene, sidestepping broader questions about the general strategies (if any) that police should rely on; indeed in some respects it undermined the possibility of sustaining and governing such general strategies. Second, it constructed "the public" as an aggregation of individual callers, with implications for the nature of the community interests that would shape policing that we have already alluded to. These features of the call-for-service system illustrate how the institutional form used to elicit public input shapes its content, value, and distinctive challenges.

The article proceeds as follows. In Section 1, we elaborate on the intellectual context for our research, outlining the key ideas from the history, philosophy, and sociology of technology that we will use to interpret the history of the call-for-service system and clarifying the sense in which the changes we describe were not entirely intentional; we also discuss the archival sources we analyzed to reconstruct that history. The rest of the paper describes the evolution of the callfor-service system though the early 1970s. Section 2 describes police mobilization in the years before the call-for-service system took shape and the key technological elements that eventually transformed it. Section 3 describes the competing visions the public and the police initially had for the new system, and Section 4 details how police agencies managed this unsettled system. Section 5 describes how the centralization, specialization, and civilianization of call-taking and dispatching eventually transformed that system, establishing a protected channel between the

caller and police. Section 6 concludes, drawing out the implications of this history for our understanding of policing and democracy.

1. Political Choice and Technological Change

The call-for-service system expanded the police role in spite of, rather than because of, the priorities of those who designed it. That system began to take shape in an era when the police reform movement aimed to *narrow* the scope of the police function to focus on crime control (Fogelson 1977: 106-10, 190-1). As we will show, the police leaders and policymakers who championed the early call-for-service system did indeed hope it would help them solve crimes more effectively, but from the very beginning the public put it to other uses. The ease with which the public could now contact the police ultimately meant that police leaders relinquished their own control over the scope of the police mandate by delegating decisions about what counts as a "police matter" to anyone with a telephone. As soon as the call-for-service system assumed its mature form in the 1970s, disappointment quickly followed, as a wide range of stakeholders complained about the way it deformed police work and did little to help the police fight crime (Webster 1970; Gay, Schell, and Schack 1977; Spelman and Brown 1981).

In these respects, the rise of the call-for-service system does not seem an intentional effort to carry out a deliberate political program so much as a case of technology out of control—a Frankenstein's monster that, once created, took on a life of its own and ended up threatening its creators (Winner 1977: ch. 8). That does not mean that the impact of technology on policing was inevitable but only that it was not entirely intended. As Langdon Winner observed in his classic study of technology and society, that is a common pattern, but one that prevailing modes of thought have made it hard to understand: "Whereas the immediate application of a particular technology is usually conscious and deliberate, other consequences of its presence in the world

often are not. It is this gap between original intentions on the one hand and ultimate effects on the other, the truly chosen and the never chosen, that has perplexed many schools of thought" (Winner 1977: 74).

One way out of this confusion begins with the recognition that both technological changes and intentional human actions have impacts only in context—that the impact of each is mediated by the other (Orlikowski 2000; Latour 1994; Callon 1985, 1986). The impact of any single technological element (or any single human choice) on an organization or social practice is indeterminate; it depends on how that element interacts with other human and material components of the broader assemblage it becomes a part of. To understand the implications of new technologies like the telephone and the police radio, we need to focus not on the technologies themselves in isolation, nor on human decision-makers in isolation, but on the joint operation of whole networks of human and technological features that continually interact with one another in relatively stable patterns (e.g. Latour 1994, Callon 1984, 1985, 1986; Hughes 1983; Orlikowski 2007). Human choice plays a role in this evolution, but it does so through "adaptive responses to the conditions brought by a new order" rather than synoptic control of the system's eventual form (Winner 1977: 88).

Following Michel Callon, we can understand the key decisions as those that formalize the roles and relationships in a sociotechnical system—the decisions that provisionally simplify the elements of a network and juxtapose them in temporarily stable relationships with one another, connecting some elements and severing the connections among others; as well as the resistance to those decisions mounted by those who oppose them (Callon 1984, 1985, 1986; cf. Latour 2007). These mechanisms provide a useful framework for investigating the history of the call-for-service system. When the police radio first made it possible to relay telephone calls to

officers in the field, calls from the public were initially handled by precinct commanders who performed that task as one part of a broader set of responsibilities, and in that context they often subordinated the callers' demands to other organizational priorities. Eventually, however, police organizations centralized, specialized, and civilianized that task in a way that effectively created a direct and largely unfiltered channel between the caller and the responding police officer. As we will show, those changes did not result from a deliberate plan to elevate the caller's interest but from projects of centralization and bureaucratic rationalization motivated by other goals.

In these ways, the accumulation of many seemingly insignificant developments can eventually have profound political implications (Winner 1977, 2020). It is not that technology matters *instead of* politics but that it relocates the key sites of political struggle—away from the kinds of visible battles over ideology and institutional strategy that historians and sociologists have often emphasized and towards seemingly irrelevant local dramas about the design of sociotechnical systems.

Database and Methods

The research agenda we have outlined requires a close look at the inner workings and practices of police departments during the era when the call-for-service system took root. Wherever possible, we aimed not simply to study policy decisions and public statements about policing but also to investigate how those policies and statements translated into everyday practice inside police departments and in the field. The sources we relied on were selected because they helped us to do that.

The most important archival records we relied on come from studies conducted by external organizations and consultants that had investigated police operations in multiple cities throughout the United States, particularly (but not exclusively) the Public Administration Service

(PAS) and the American Bar Foundation (ABF).¹ In the middle decades of the twentieth century, these influential and widely known organizations assembled detailed reports about internal practices and procedures of various government departments and agencies, including the police. The intensive ABF studies of dozens of police departments in Kansas, Michigan, and Wisconsin in the mid-1950s, in particular, provide a uniquely detailed picture of actual policing practices, aiming to illuminate the day-to-day administration of justice (Walker 1992); importantly, they do that in rural, urban, and suburban jurisdictions that span four states.² The field notes collected for the ABF studies remain a dramatically underutilized window into the mid-20th century criminal justice system, presumably because access to them remains heavily restricted due to the agreements that researchers made with the agencies they studied (nearly 70 years after the original research was conducted, ABF documents must still be viewed on-site at the Wisconsin Historical Society archives and cannot be photocopied). The consultant reports by PAS and other influential consultants provide less detailed accounts of the cities they studied, but they add context and revealing details for dozens more cities throughout the U.S. While those reports must obviously be read with a critical awareness of the reform agenda the consultants were pursuing, many of their observations appear to be relatively unambiguous, and where possible we have tried to corroborate them with other sources, such as agency documents and newspaper reports.

¹ We also consulted the surveys of mid-20th century police departments conducted by other organizations, particularly the Institute for Public Administration, the Bureau of Public Affairs, and the Bureau of Municipal Research, but with a few exceptions (cited in our bibliography), these reports contained little relevant detail about police communications systems.

² The project focused on jurisdictions in Michigan, Wisconsin, and Kansas, but the Kansas team also studied the Kansas City Police department in Missouri. The principal jurisdictions were not a representative sample of the U.S.—they were, for example, chosen partly for their proximity to ABF headquarters in Chicago to facilitate travel and administrative control—but they do provide a window into policing practices in multiple jurisdictions that did not necessarily have close connection to national reform networks or to each other. For background on the way the ABF selected jurisdictions, see ABF (1958: vol. 1).

We supplement these research studies and consultant reports with a wide range of other relevant municipal documents, including reports issued by police departments and finance commissions, police department communications training manuals, testimonies to the Federal Communications Commission, minutes from annual International Association of Chiefs of Police (IACP) meetings, newspaper coverage, and the prescriptive police management literature. We assembled this somewhat eclectic body of materials through traditional strategies for historical research, following leads from the references contained in other primary and secondary sources, searching historical archives known to us that contained policing material, and conducting focused searches of digital databases (particularly WorldCat and HathiTrust) to identify documents that discussed the development and use of the new communications technologies in policing; we then gathered these materials through in-person visits and remote requests to multiple archives and libraries across the U.S. We cite all of the documents we relied on for this analysis in our bibliography (though we also consulted dozens of other documents that proved less useful and do not appear in our reference list). We inductively coded these archival records for concepts and themes that characterized the ways in which police agencies understood, processed, and responded to calls for police service from the public, including the changing organizational location of call response and the considerations that governed it.

We will describe the emergence of the call-for-service system as a national story, though we will also note relevant variation across the cities we studied. We frame our narrative that way for two reasons. First, to an important degree, reform actors who performed on the national stage in fact had an important impact on the adoption of the new communications technologies throughout the country. As others have noted (e.g. Carte and Carte 1975; Fogelson 1977; Walker 1979), after the beginning of the 20th century, police reform in the U.S. increasingly came under

the influence of an emergent professional community that was national in scope, as organizations like the International Association of Chiefs of Police (IACP) provided a forum for professional discussion and interaction, reform groups like the Public Administration Service (PAS) pursued a distinctive reform agenda throughout the U.S., and prominent chiefs like August Vollmer and O.W. Wilson became recognized national leaders. Part of our analysis focuses on the more-orless coherent agenda that this emerging national professional community pursued in the area of police communications, including the agenda pursued by Wilson, PAS, and their associates. Another part, however, investigates the actual (often unintended) consequences of that agenda by tracing the way myriad police departments throughout the U.S. absorbed and implemented itparticularly the departments that the ABF studied in the mid-1950s, but also the departments investigated by PAS and other active consulting firms, as well as the miscellaneous handful of agencies that left more idiosyncratic records that shed light on that question. In analyzing these materials, we do find some variation across cities, particularly in the chronology of exactly when the most important changes unfolded; but in general, we conclude that these far-flung cities converged on similar models for their call-for-service systems.

The dates announced in our title as the boundaries of our study are only approximate, since the historical development we hope to chronicle was continuous rather than abrupt, but they provide a rough sense of the timeline over which reactive policing took shape. Our end date of roughly 1970 was itself a conclusion of our research, for the call-for-service system that prevailed in most agencies by that time had all the major elements (centralization, specialization, and civilianization) and problems that characterize such systems today. We formally begin in 1880 (though the most significant developments emerge a half century later, and most of our primary archival research focused on that later period) because that is the year Chicago fielded

its influential telegraph system—arguably the first major effort to use advanced technology to make it easier for the public to summon a police officer. In fact, though, that moment is somewhat arbitrary, since more primitive "technologies" like whistles, neighborhood police stations, and police uniforms had already served a similar purpose. In any case, we will begin our story even earlier, drawing from the secondary historical literature to describe the context out of which those new practices and technologies emerged.

2. Mobilizing the Police in the 19th and Early-20th Centuries

Today's reactive pattern of police mobilization is nearly the opposite of the one that those who founded modern police institutions originally envisioned. Early police officers were charged with proactive patrol of their beats-trying doors and windows to make sure they were locked, monitoring junk shops and dance halls, moving loiterers along, keeping an eye out for known pickpockets, regulating taverns and hackney cabs, controlling people who were flagrantly drunk in public places, and so on (e.g., NYPD 1895)—and arrest dockets were dominated by public order charges like disorderly conduct and public drunkenness that officers came across during their routine patrol in public spaces (e.g., Steinberg 2014: 29-30; Churchill 2017: ch. 2). Reactive mobilization by individuals was the exception rather than the rule; the whole point of establishing a *public* police force was to craft an approach to public safety that would not depend on the fickle preferences of individual members of the public (e.g. Colquhoun 1797/2012: 225-8; Lane 1967: 6-7, 35; Steinberg 2014: 2-5). This proactive mandate was defined and enforced by a particular structure of relationships among police officers, police leaders, and people outside the police organization. Sergeants, roundsmen, and precinct commanders announced work assignments for patrol officers in daily roll calls at precinct headquarters and during interactions in the field, and all of them operated under the watchful eyes of the ward leaders and other local

politicians who had significant influence over police work during this era (Fogelson 1977: ch.1; Willemse 1931).

Reactive mobilization did play a role in early American policing, but the primitive state of communications technologies and the prevailing organization of police work at the time made that role a limited one—a tool for the accomplishment of specific tasks, rather than a pervasive feature of policing practice. In particular, the detective function remained as reactive as it had been before the rise of modern police forces: individual victims reported crimes to the police or the courts as they always had, but now police served as public investigators and prosecutors, devoting public resources to the investigation as public priorities directed. The patrol function was a different story. Occasionally people summoned police to intervene in emergencies and crimes in progress by flagging down a passing officer, yelling out for help in hopes that one would be nearby, or rushing to the nearest police station. But it was obviously difficult to mobilize an officer in any of these ways, and the evidence about the nature of late 19th century police work that has survived suggests that direct requests for immediate help by a citizen were rarer than they are today. Residents did visit the police station and find officers to request help, but they usually did so to report a crime (especially a theft) that had happened in the past, rather than to seek help resolving an immediate crisis (Thale 2007; von Hoffman 1992; Wilentz 1979; Willemse 1931).³ Everyday patrol work did not mainly consist of resolving emergencies nominated by individual members of the public but in performing a variety of crime prevention and public order maintenance tasks defined by police officers, police leaders, and their political masters.

³ Indeed Churchill (2017) argues that in 19th century Britain, victims often did not summon the police even in these cases, preferring to retain control over their own conflicts instead.

The Emergence of the New Communications Technologies

From the late 19th century onward, many American cities deployed new technologies that made officers more accessible to the public in emergencies, laying the foundations for the calldriven strategy that dominates policing today. The full impact of those technologies did not arise immediately from any single innovation but only after a long series of technological and organizational changes eventually coalesced into a coherent system for governing police mobilization. It is useful, however, to set the stage for that story by describing the emergence of discrete technological elements that played a significant role in it.

In 1880, the Chicago Police Department piloted a system of public alarm stations on streetcorners throughout the city as well as private alarm boxes that businesses and individuals could purchase for \$30. The public alarm boxes were octagonal versions of a 20th-century telephone booth, designed to hold a single person inside. A key—available to "respectable citizens"—was required to open the booth, which contained an iron box with a protruding lever that summoned the police when pulled (Rolfe 1892). Delegates from other cities came to Chicago to learn about the new system, and city officials demonstrated how it worked to the attendees of the inaugural meeting of the National Police Association in Chicago in December 1880. Within a decade Milwaukee, Detroit, Boston, Cincinnati, Brooklyn, and many other major cities had installed systems largely identical to Chicago's (*NYT* 1881; *Detroit Free Press* 1884; *Boston Daily Globe* 1884; Mason 1902).

As commercial telephone services spread in the late 19th and early 20th centuries, private telephones began to displace the alarm box as a major channel for individual members of the public to summon the police. Washington, DC already installed telephones in each precinct station and a few other locations in 1878, and New York City established an elaborate telephone switchboard to receive calls by 1893; several other big cities employed several full-time

telephone switchboard operators by the early 20th century. At first, police mostly used their telephones for internal communications, since few members of the public had phones of their own before World War I (Fischer 1992: 22). As the telephone proliferated, calls from the public increased: although fewer than 1 in 10 households had a telephone in 1900, by the late 1920s nearly 4 in 10 did, and a solid majority of households had their own telephone by 1950 (Fischer 1992: 22). At least by the 1930s, close observers of policing reported that the telephone had become the most common means for requesting help in most of the large and mid-sized cities they had studied (*e.g.* IPA 1937: 101; Wilson 1942: 13).

By themselves, the telephone and the callbox could do relatively little to alter the pattern of police work, since it remained cumbersome to mobilize officers to respond to callers' requests. Many cities kept small squads of reserve officers at the precinct stations so that they could spring into action immediately when someone came to the station or contacted it through a call box or telephone (Fosdick 1920: 316; Leonard 1938: xiv, 16). Keeping a reserve force of idle officers was hardly a model of efficiency, so many departments tried to devise ways of summoning officers who were out on patrol to the scene of an emergency. Most cities had installed networks of call boxes where officers were supposed to check in every hour, and when they did they could be dispatched to any trouble spots that had arisen (Leonard 1938: 6 ff.). That system proved too slow and haphazard to serve as an efficient emergency response system (e.g., Harrison 1934: 102). After the turn of the century, many cities equipped their call boxes with lights or bells that would alert passing officers to call the station for a message (e.g. Monroe 1940: 256; Leonard 1938: 17-20), but that solution was imperfect; Chicago, for example, let its recall signals deteriorate by the early 20th century (Citizens Police Committee 1931: 116). The caller's reach and influence over police work in the field remained limited.

Police radio systems provided the definitive solution to this problem. Beginning in Detroit in 1928, police departments across the country installed workable mobile radios in police cars (Leonard 1938: 35). At first the radios could only receive broadcasts from a central transmitter, so headquarters had no way of knowing whether the message had been received, but two-way radios soon became common. By 1940, essentially all cities larger than 100,000 population had installed radios in their police cars, and most smaller cities had as well (American Municipal Association 1940: 3). By 1949, 884 of 904 cities larger than 10,000 population used radio cars (Byers 1951: 1123). Responding to calls for service broadcast over the radio rapidly became a substantial part of police work (e.g. Monroe 1940: 264-70), though organizational resistance to that imperative still constrained its impact in ways we will describe shortly.

3. Competing Visions of the New Communications Technologies

When Chicago first installed its police telegraph system in the late 19th century, city officials had a clear image of what they expected the public to use it for. Business owners who installed an alarm box in their store could summon the police to arrest "forgers, sneak-thieves, swindlers, shoplifters, pickpockets, and pennyweighters" before they had left the premises, and residents could summon police if a burglar broke in during the night. When the police Superintendent issued a letter to the public explaining why he wanted to extend the Twelfth Street Station's experiment to the rest of the city, he explained that a citywide network of telegraphs and signal devices would ensure that witnesses and victims of "serious crimes" could immediately contact the police, who could in turn mobilize the entire force with a description of the offenders, "so that the escape of criminals may be rendered extremely difficult." The alarm boxes would be used by the law-abiding public to summon police to capture the determined criminals who had victimized them before they could get away (*Chicago Tribune* 1880: 10).

This prospect of closing the criminals' means of escape echoed down the years with each new technological innovation, and it stands out as the dominant image in attempts to justify why they were needed. The Public Administration Service (PAS), an influential nonprofit local government consulting service that issued dozens of reports to police departments throughout the country, regularly stressed this rationale. Advising one city to install a police radio system in 1937, PAS explained that "the chief purpose of a communication system is to make police assistance available almost instantaneously in order to apprehend violators at the scene of the crime or while leaving it", adding that "more and better witnesses are secured simply because the officers get to the scene before they leave" (PAS 1937: 71). Another prolific consultant advised a city that a more rapid response to a distressed caller "might make the difference between a criminal's being arrested or escaping" (Bureau of Public Affairs 1946: 16-7). Articles in municipal government publications and speeches to national police conferences repeatedly described how instantaneous communications made it possible for police to surround a house before the burglars exited with their loot or set up checkpoints to block a criminal's escape routes (e.g. Rutledge 1929: 23-4; IACP 1920: 87, 1923: 103-4; Shenefield 1931; Anonymous 1937; Leonard 1944).

As much as anything, the advocates of the telegraph, the call box, telephone switchboards, and police radio hoped that those tools would become aids to detective work, allowing police to capture criminals in the act, or at least gather vital evidence that would eventually help to capture and convict them while the memories of victims and witnesses were still fresh. Police treated the new technologies as a tool for accomplishing one of their existing responsibilities more effectively, specifically the one responsibility—detective work—that had *always* been largely reactive. By introducing those technologies into policing, however, they

opened policing to new demands and expectations from individual callers that they could not fully control—to a motley and largely unbounded vision of the police mandate that diverged substantially from their own.

Public Use of the New Communications Technologies

The calls that came in when police agencies finally assembled modern communications systems were very different from those that dominated the speeches, consultant reports, and advertisements that fueled them. In 1932 the Los Angeles County Sheriff's department borrowed equipment from the Los Angeles Police Department to conduct a pilot study of radio cars (the city had installed its own radio system the year before), and its consultants recorded details about every one of the first 105 radio runs the Sheriff's deputies made. Leaving aside roughly a dozen that were purely administrative (such as requests to meet another officer at the police station), nearly a quarter were "disturbances," including several loud parties where the responding officers ordered the revelers to quiet down and a few rowdy groups of youth who were told to disperse. A dozen involved traffic problems, mostly minor accidents that involved no criminal wrongdoing. Ten calls reported suspicious people, including several that police dismissed as unfounded (such as a group of men changing a tire and a man wearing a mask on his motorcycle). Five calls were about medical problems, four were about fires, three involved troublesome dogs, two involved drunks, and one was about a plane crash. All in all, 20 of the 105 radio runs involved anything remotely like the crimes that police officials had emphasized when they described the value of the new communications systems, such as burglaries, assaults, thefts, and robberies. Just two of those incidents-both fights-resulted in an arrest. (In the disposition field of one of the burglary calls, the responding officer wrote "gone-no chance to get him", perhaps feeling defensive that he had failed to capture an escaping criminal the way he

was expected to.) Many of the ostensibly crime-related calls proved unfounded, including a theft call that turned out to be a property dispute between boys, an exaggerated call about a "big fight," and a reported burglary where the culprit turned out to be a dog who had chewed up the curtains and rugs (Jones and Earl 1933: 5-21).

The detailed records from the LA Sheriff's experiment provide an uncommonly clear window into early call-for-service systems, but the experience they report was apparently common. As Essex County, New Jersey, considered a countywide police radio system four years later, several local officials objected that the new system would quickly be overwhelmed by "an increase in the amount of police business due to the use citizens will make of the service" (Woelfle 1936: 9). Advocates of the new radio system tried to rebut this concern by conducting a survey of several large cities that already had experience with the radio. One question asked: "From your experience can you advise generally if the use of Police Radio increases the number of police calls?" Every city responded that it had. Los Angeles reported that "an appreciable increase will be noticed immediately upon it becoming generally known that radio is being used, as many people will call on matters that they would otherwise ignore." Saint Louis stated that "as people learn that police in radio-equipped cars will arrive within a very short time, in case of emergency, they come to depend upon the police more than any other organization, to stop petty arguments, to investigate minor cases, etc." The officials who responded from other cities were enthusiastic about police radio, but they conceded that it altered the volume and character of calls from the public (Woelfle 1936: 16-7). A few years later, Boston's finance department, worried about the sprawling duties of the city police in an era when municipal budgets were stretched thin, lamented how the city's new police radio system had contributed to the problem:

To many people the police are intended to serve all kinds of situations. Since the prowl car patrol has come into existence, the police apparently cultivate this assumption. There

appears to be almost no limit beyond which the police will not go in trying to accommodate the public. While the desire to serve in whatever manner they can is commendable, as previously stated, it often results in the assumption of tasks which do not come within the scope of regular police duty; and the degree to which this elaborated service is given increases the need for policemen.

The report went on to list dozens of calls that the prowl cars had responded to: animal in tree, barking dog, bell ringing, boys on roof, boys bathing, boys in doorway, boys in schoolyard, boys chasing a chicken in street, broken window, drunk in doorway, garbage can thrown on front piazza, mail box on fire, noisy radio, noisy party, noisy newsboy, person locked out of house, suspicious person, and so on. Such calls altered the character of police work, the report charged, as radio cars replaced the foot patrol officers who had engaged in proactive patrols (Boston Finance Commission 1941).

Police Responses to Public Demands

Officers in the field were frustrated by some of the calls they had been assigned. In Milwaukee, a white woman told police that two Black men had been loitering near a grocery store and heard one of the men tell the other: "Well, it's about time now". When the Lieutenant told a group of officers to investigate, the ABF researcher riding along with them reported that they "did not conceal their annoyance over having been called back on a 'chicken' deal like this" (ABF 1956: 10027). Sheriff's deputies in both Wisconsin and Kansas complained that many public requests involved conditions that police had little authority to regulate, such as a filthy and overcrowded trailer or a neighbor dumping garbage on his property (ABF 1956: 10034, 10536).

As patrol officers in the field responded to the deluge of calls, police leaders and policymakers mostly ignored the concerns they raised about the proper boundaries of the police role. After the Boston Finance department's report flagged its concern about nuisance calls, it said nothing else about them, and it made no recommendations to address them. The Los

Angeles Sheriff's department said even less. In one short paragraph, its report briefly listed some of the most common types of calls that deputies had taken but did not comment on their character; it then devoted several pages of minute analysis to the precise number of miles the patrol cars traveled, how long it took them to respond, the FCC's position on frequency allocation, and other technical details of the radio transmitters and receivers, ignoring the social and organizational implications of the radio system. The report continued to emphasize the possibility that rapid response would help capture escaping criminals, but it said nothing about the large number of calls about loud parties, obnoxious dogs, and unfounded suspicions (Jones and Earl 1933). In Essex County, the advocates for regional radio read the results of their survey as good news: cities that had tried (in unstated ways) to quantify the increase in call volume gave estimates ranging from "a very slight increase" to 30%—far short of the doubling or tripling of calls that critics of the regional plan had predicted. That finding supported their view that the critics of police radio were being alarmist, in that the heightened call volume would not be enough to swamp the system. They interpreted the key problem a technical concern about the radio system's capacity, not a substantive concern about the proper scope of the police role (Woelfle 1936). In these ways, police leaders and those who advised them mostly ignored the mundane reality of the calls people actually made to the police, and they continued to claim that the technology would help police capture escaping criminals even as evidence accumulated that the public overwhelmingly put it to other uses.

There were, however, exceptions. Writing in the middle of the great depression, at a time when municipal finances were in decline, Wichita police chief O.W. Wilson—who would go on to become the most influential police leader in the country—lamented the aloof attitude that police generally took towards the public. Wilson believed that this attitude rested on "an ignorant

misconception of the police function," namely, "a failure to understand that the duty of the police is to serve" (Wilson 1940: 80). He insisted that police had to become more customer service oriented: "A reception equal in quality to that provided by the best retail establishment in town, whose existence depends on public good will, should be accorded the citizen who comes to the police for help" (*Ibid.* 85). He particularly stressed that "the answering of a telephone or the offering of assistance to the citizen who calls at headquarters may seem to be a matter of small moment, but small matters bulk large in the aggregate. On them the reputation of the department is built" (*Ibid.* 84; cf. Wilson 1950: 396). Several years later, the commander of Wichita's communications division bluntly drew out the implications of this perspective for call-taking:

The good opinion of your citizens is essential when you present your operating budget for approval. . . A little attention to your telephone service may pay big dividends at your next bond election when you ask for more officers, new cars, or larger quarters. . . . Telephone operators. . . should be alert and businesslike and give the citizen the impression that they are personally interested in their troubles. Remember that these employees represent *you* as the department administrator and that they are dealing with citizens, and taxpayers, not criminals (Byers 1951: 11280-1).

This perspective echoed across the country. An early article on police records and communications by Donald Stone—one of the founders of the Public Administration Service, the influential champion of mid-century police reform (Fogelson 1977: 164, 175)—suggested that although the police might discount "a report by Mrs. Cheeseborough that the neighbors' chickens have invaded her garden, or a complaint by Mr. Gump that the radio next door is making an outlandish nocturnal disturbance of the peace", they did so at their peril:

Although to a police department such complaints are minor and insignificant, the manner in which they are handled will determine the attitude of Mrs. Cheeseborough and Mr. Gump toward the police in general. When one considers that there are hundreds of these minor cases to each sensational crime, the great necessity of control at this point is readily apparent. Departments which handle these lesser matters with dispatch obtain the confidence and good will of the citizens as a whole (Stone 1933: 670; cf. IACP 1935: 60; ICMA 1954: 381). Two decades later, when the ABF researchers visited Milwaukee, a police manager opined that "the success of the Milwaukee Police Department depends in very large degree in the trust the public places in the police department and the services extended by the police department to the public"; he went on to explain that the police could strengthen that trust by responding even to trivial calls (ABF 1956: 10005).

These sentiments were not universal,⁴ and they did not seem to have much impact on the way calls were actually handled in the early decades of the call-for-service system for reasons we will explain shortly. Nevertheless, they expressed an important viewpoint. Although the new communications systems rarely fielded the kinds of calls that their champions had envisioned, many police leaders and their advisors seemed inclined to defer to these unexpected public requests—not so much because they believed that they really were proper police business but because they believed that treating them that way would shore up public support for the police.

This way of thinking ignored a crucial feature of the "service" that police provided, which often satisfies one person's desires by frustrating another's. When Donald Stone implored the police to respond to Mrs. Cheeseborough's calls to earn her support, he did not seem to consider the perspective of Mrs. Cheeseborough's neighbor, who may have wondered why the police were spending so much of their time bothering him and his chickens. By equating "the public" with "the caller", this perspective effectively excluded a major segment of the public from consideration—namely, the people who the Mrs. Cheeseboroughs of the world were calling about. That omission had significant implications related to race and class, since most people who had easy access to their own telephones during this era were whiter and wealthier than the

⁴ The most notable dissent came from August Vollmer, a mentor to Wilson who remained the most influential police leader in the country at the time. Vollmer cautioned that many of the demands that individuals made on the police "are entirely out of their sphere", and he added (somewhat hesitantly) that many of these requests "must of necessity be tactfully denied" (Vollmer 1936: 185-6).

average American (Fischer 1992: 90-3, 111, 117). Responding to their calls may well have been a useful way to build support among politically influential bond voters—the people the Wichita communications director described as "citizens and taxpayers, not criminals"—but it would make police priorities responsive to a skewed subset of the broader public.

4. An Unsettled System

These competing visions of what the call-for-service system would be used for remained unresolved for decades. In the meantime, the staff who operated it decided how to respond to calls from the public largely on their own, without much guidance or constraint from police leadership. Those responses were uncoordinated and decentralized, determined by whoever happened to be assigned the task of answering phones and dispatching patrol cars—something that varied across agencies in the early decades of the call-for-service system. Often, however, call-takers and dispatchers tried to deflect many of the calls they found inappropriate. Those efforts amounted to a campaign of resistance against the way the public was trying to use the new communications technologies—an attempt to thwart the incipient construction of a direct channel connecting individual callers with a police response (cf. Callon 1984).

Gates and Gatekeepers

Some mechanism to deflect public demands had always accompanied new technologies that made it easier for members of the public to mobilize the police. When Chicago installed its telegraph alarm boxes in the late 19th century, it vigorously controlled access to them. Police made keys available only to "respectable citizens", explaining that they "intend to be very careful in giving out keys," and when a key-holder used it to open an alarm station, the key remained stuck inside until an officer arrived; since all keys were numbered, anyone who issued

a false alarm would not only lose his key but could also be tracked down and fined \$50 for the offense (*Chicago Tribune* 1880). This design expressed the department's cautious attitude towards public demands for police service in material form, and it remained in place for decades, even after the telegraph boxes had been replaced with telephone call boxes. As other departments copied Chicago's call box system, most of them restricted access to the boxes to people who they deemed "respectable," "responsible," or "discreet" (e.g. *NYT* 1881; *Boston Daily Globe* 1884; Leonard 1938: ch. 1). After the turn of the century, a few began to leave the boxes unlocked or installed a "citizen's call button" on the outside so that anyone could contact the police station, but many departments restricted access to the boxes until the 1940s or 1950s (Gourley and Bristow 1961: 181; ICMA 1954: 392). Milwaukee, for example, did not unlock its call boxes to the general public until the late 1940s, and only then because of a telephone operator's strike that temporarily hampered private telephone usage (ABF 1956: 10009).

The locks and vetting that had once controlled access to the call boxes and their keys eventually became less significant obstacles to public access, as the private telephone gradually replaced the police call box as the main channel for contacting police. But that new channel did not yet give callers unfiltered access to a police response, for the human gatekeepers who manned the telephone switchboards replaced the physical barriers that had restricted access to the call boxes. Municipal documents, training materials, and police management literature suggested that dispatchers screened out less serious calls (*e.g.*, Woelfle 1936: 16-7), and the leading text on police communications suggested that calls about matters of "minor importance" could be handed over to the precinct station, where officers could decide whether any response was warranted; central dispatch would send a car only in true emergencies (Leonard 1938: 57).

The ethnographic material compiled by the American Bar Foundation in three states from

1956 to 1957 provides more concrete evidence of gatekeeping by mid-century telephone operators and dispatchers. The most detailed information came from Detroit, where researchers observed all the activity undertaken by a precinct desk Lieutenant during a two-hour period (including the calls that he answered while managing the station) and left a tape recorder on another desk Lieutenant's desk for an hour on a different day. The desk Lieutenants refused to send a car in response to half of the calls for service documented during these two periods. In one, a woman reported that two men were arguing in her home; the desk Lieutenant asked whether the men had knives, and when she answered that they did not, he explained that "the police were not needed, that the squads were busy, and that, if the men commenced to fight, the complainant should call again." In another, a woman called in distress indicating that "she was going to kill her husband" and demanded that the police come remove him from their home; the desk Lieutenant refused to send a car on the grounds that the husband "had a right to live in his own home". In still another, a man indicated that he had been "held up," but the Lieutenant was suspicious that the caller was drunk so he prolonged the conversation; he eventually concluded that the man was definitely drunk, so he asked him to come into the station to report the holdup the next day (ABF 1956: 11042, 11100). Dispatchers would send a police officer to respond to calls like these today (see, e.g., Lum et al., 2020: 1188). At the end of their months-long study of Detroit, ABF researchers concluded that many calls for police service "are dismissed by the officer receiving the information as not being worthy of police attention" (ABF 1956: 11105). To be sure, less busy departments probably did not filter calls as aggressively as Detroit, as some told researchers that they would readily respond to minor complaints like "barking dogs" (though the researchers never actually observed such calls during their ridealongs) (ABF 1956: 11158). Nevertheless, some call-takers and dispatchers in rural and suburban jurisdictions did indicate

that they exercised discretion in deciding whether to send an officer (*e.g.*, ABF 1956: 10536, 11158).

As the examples observed by the ABF researchers in Detroit indicate, some of this gatekeeping was objectionable. The Detroit desk Lieutenants repeatedly rebuffed abused wives because they felt their plight was a private matter, ignored intoxicated victims, and seemed reluctant to take the complaints of sex workers seriously. The point is not that the people who answered calls and dispatched police cars in this era were model gatekeepers, but simply that they actively meditated between public requests and police response.

The Organizational Context of Gatekeeping

Police agencies did little to standardize or otherwise shape this gatekeeping work, even as they implicitly acknowledged its importance. Training materials told call-takers that they should only send a police car to legitimate police calls: one handbook from 1938 explained that the officers taking calls from the public needed to know "when and in what cases to advise, direct, or reroute citizen calls" but did not articulate any criteria they could use to do that (Adams 1938: 72). Training bulletins and communications manuals did not elaborate either. "The officer to whom the call is directed is fully protected in accepting the Communications Division's conclusion that the facts justify emergency action," an LAPD bulletin from the 1940s explained. "He must have sufficient information to justify his conclusion that *a situation exists which requires immediate police attention for the protection of persons or property*" (original emphasis). The bulletin did not, however, provide any further guidance about what this standard implied in practice (Parker 1949). Similarly, the communications manual for the Michigan State Police indicated that some complaints should not receive a police response, but it assumed that distinction could be drawn intuitively by people with a policing background: "One general rule

should be emphasized. Do not request radio to put out a broadcast for some other officers to make an investigation you would not make yourself" (Olander 1941: 11). Despite pages and pages of minute guidance about how to operate the dispatch system and formulate succinct messages suitable to the radio, these documents never articulated substantive principles or adduced examples to indicate what kinds of calls merited a police response.

Police leaders found it difficult to articulate a general principle that could adequately distinguish calls that warranted a police response from those that did not. During a 1937 IACP meeting, one participant asked for clarification about when a call qualified as an "emergency" that should be broadcast over the police radio:

QUESTION: Lieutenant, do you mind explaining what an emergency message is?

LIEUTENANT JETT: That has been asked me many times. There are many examples of all the types of emergencies that might occur, but we term emergency—and feel that you should handle as emergencies—only those messages which relate to law enforcement matters. Messages regarding a stolen automobile, or burglars, or things of that kind, are, of course, real emergencies. But once in a while it is observed that a message will come along which does not appear to be an emergency, but which, on investigation, has an emergency at the bottom of it. Therefore, we don't like to set out the exact terms of emergencies. An emergency is not, however, a private conversation between officers on the force, or a transmission of unnecessary or superfluous signals (IACP 1937: 47).

Other than the tautology that police radio should not broadcast "unnecessary or superfluous" information or the obvious ban on "private conversation between officers," Lieutenant Jett provided no way of distinguishing incidents that merited radio dispatch from those that did not.

Embedded Gatekeepers

The lack of meaningful guidance and constraint left telephone operators and dispatchers largely on their own as they decided how to respond to the deluge of calls that increasingly flowed in from the public. They made those decisions in a way that reflected the experiences, expectations, and relationships associated with their role, which was typically not the role of a communications specialist but of a police official with other duties and preoccupations who also happened to answer the phone or dispatch cars over the radio.

Although the organizational location of the call-taking and dispatching tasks remained in flux from the 1930s through the 1960s, many departments used an arrangement similar to the one just described in Detroit, where a precinct official (typically a desk Lieutenant or Sergeant) answered many routine calls and decided whether to send a car to respond to them. They carried out those tasks as one component of a broader role. The desk Sergeant might be discussing whether to detain an alleged thief with the detectives who had arrested him overnight, and those deliberations might be interrupted by a phone call from a disgruntled husband who said his wife had slapped him and then left for the bar; the sergeant might then contact the turnkey at police headquarters to get a full report on all the inmates currently being detained (e.g. ABF 1956: 11042, 11105). As we will describe below, this arrangement contrasted sharply with the more specialized call-taking function that would eventually take root; in the early years of the call-for-service system, the gatekeeping task was *embedded* in a broader policing role.

Whether they worked in the precincts or in a centralized communications division, the early gatekeepers were typically sworn officers. The leading text on the topic, V.A. Leonard's *Police Communications*, maintained that telephone operators should have "a good record of two years on the force, or the time spent on police duty is sufficient to have given him a fair knowledge of the department's operating procedure"; it went on to highlight one prominent chief who assigned his most promising officers to these positions (Leonard 1938: 63-4).⁵ Even the Boston Finance

⁵ Leonard was heavily influenced by his former boss and friend August Vollmer, who he thanked in the introduction of *Police Communications* as the most important influence on his thinking about the topic (Leonard 1938: ix). As noted in the previous footnote, Vollmer was at least ambivalent about the potential impact of public demands on the scope of the police role. After the passage that insisted that many public requests for police assistance should be "tactfully denied", Vollmer went on to opine that "some of these reports are on the borderline, and it requires an expert to determine whether the complaint . . . should or should not have the attention of the

Committee, searching intently for ways to cut costs in the city's police department in 1941, conceded that sworn officers belonged in the dispatch center (Boston Finance Committee 1941: 68-9). A few cities did employ civilian call-takers in the 1930s (e.g. Leonard 1938: 66), but that arrangement seemed to be the exception rather than the rule, and dispatchers were almost exclusively sworn officers. In the cities studied by the ABF in the mid-1950s, every agency still employed sworn officers as dispatchers, and most used sworn officers as call-takers as well.

The background of these early dispatchers and call-takers was important because it meant that they brought a distinctive set of assumptions, expertise, and experiences to their work. As he fielded calls, a desk Sergeant could rely on his own knowledge as a police officer of the legal authority and other tools that the responding officer would be able to draw from to handle the caller's problem; he might also compare the seriousness of that problem with the rest of the precinct's workload. For example, one fieldnote recorded in Detroit's 13th precinct reported that "the average officer in this precinct, after spending several months here, apparently gets conditioned to the nature of the offenses which the police are called upon to handle, and does not look upon a stabbing—for example—with the same degree of seriousness as would an officer in one of the outlying areas. What might appear to be an aggravated assault to another officer assigned to one of the outlying areas or to some other municipality would, to the officer of the 13th precinct, be looked upon as a common family disturbance" (ABF 1956: 11105). Even when the people who took calls and dispatched officers worked for a central communications division, they were usually sworn officers who performed those tasks in light of their background knowledge and commitments as police officers.

police" (1936: 185-6). Leonard's emphasis on the need for sworn officers in the communications division seemed to reflect a similar sense that some degree of expert gatekeeping would be needed.

5. The Establishment of the Call-taker Role

As the interface between callers and the police, the people who answered the telephones and operated the police radio had the power to manage the deluge of public demands by informally screening many of them out. Soon, however, these gatekeeper positions were transformed along many dimensions—shifted from one part of the police department to another, and eventually out of the police department altogether; vested with unilateral authority to dispatch officers without consulting precinct commanders; reconceptualized as a largely clerical task that did not require the exercise of discretion; and reassigned from sworn police employees to civilians. This multifaceted transformation fundamentally reshaped the social location and expectations of the people who operated the new police communications technologies, establishing the technologies themselves and the calls that flowed in through them as the stubborn external force that police agencies today often experience them as.

The Centralization of Police Communications

In the early 20th century, police precincts were a locus of authority in many American police departments, the place where police priorities and strategy were debated and formulated under the close supervision of neighborhood politicians. A main thrust of 20th century police reform aimed to relocate that authority to police headquarters, in part to combat the influence that ward leaders had on the police via the precinct leadership (Reiss 1992: 52, 58-9; Fogelson 1977: 91, 159, 176-7).

That effort to centralize police command authority intersected with the rise of police communications technologies in a way that significantly shaped both projects. Since precincts had been justified as places where city residents could access their police—reserve officers often remained at the station to be mobilized as needed, and patrol officers periodically checked in

there for instructions—it was easy to argue that the new system of police communications made them obsolete: now every car in the field was part of a reserve force available for emergencies, and no one needed to walk down to the local precinct station to ask for help; they could just call. Dozens of cities began to shutter precincts once two-way radio became widely available (e.g. PAS 1942: 14; Jones and Earl 1933: 40-41; Leonard 1938: 4-16; Bureau of Municipal Research 1943: 115; Citizens Research 1942: 49; Citizens Police Committee 1931: 95-6).

Initially, precinct stations in many cities neutralized the threat that communications technologies posed to their authority by taking charge of telephone dispatch themselves (as described earlier). Over time, however, reformers urged police departments to make headquarters the sole point of public access: precinct stations should no longer be listed in the phone book, replaced by an easily remembered departmentwide number such as "POLICE 1313" (*e.g.* Providence Govt. Research Bureau 1933: 39; ICMA 1954: 382; Leonard 1938: 9, 14, 313; PAS 1946: 56). Not only would that arrangement make the police more accessible to frantic callers, they argued; it would also suit the technological requirements of the new systems (Leonard 1938: 314; cf. Winner 1977: 181-5). Radio transmitters were expensive and initially complicated devices that had to be operated at headquarters, and the telephone was best operated in the same location.

Even in cities that centralized *call-taking*, the precincts sometimes retained control over key aspects of *dispatching*. In mid-century Milwaukee and Detroit, for example, the central communications division took all incoming calls but then transferred most of them to the district stations to decide whether to dispatch a car (ABF 1958: II, 23-4; V, 16). Similarly, in Worcester, Massachusetts in 1950, a telephone operator at police headquarters answered all emergency calls initially and then contacted the appropriate precinct to decide what kind of response, if any, was

warranted; only after that consultation did the telephone operator contact the dispatch sergeant to issue the order over the radio (PAS 1952: 54).

Once again, reformers sought to wrest control over this crucial decision from the precincts. In Worcester, a PAS report commissioned by the city insisted that precinct commanders should have no role in dispatching (PAS 1952: 61). PAS never gave much of a rationale for this shift, but the implications were clear: now both the call-taking function *and* the dispatching function had been relocated from the precinct to headquarters. That arrangement soon became conventional wisdom throughout the field. O.W. Wilson, who had a longstanding relationship with PAS and was listed as the sole provider of "consulting assistance" on the Worcester report, recommended centralization of call-taking and dispatching in his landmark textbook *Police Administration*, as well as his earlier textbook on police records published by PAS. In both books, he argued that centralized dispatch would foster "accurate crime accounting" by limiting the opportunities for precinct staff to buff their image by failing to record calls about crime (Wilson 1950: 325; Wilson 1942: 13). For him, the decision about the organizational location of dispatching depended more on its secondary effects on police records than its direct effect on the kinds of calls police would respond to.

Tension between Precincts and Headquarters

The centralization of dispatch sparked significant tensions between headquarters and the precincts, for it seemed to usurp the Sergeant's authority to direct his patrol officers. Who was this disembodied voice over the radio to tell *his* officers where to go and demand a report of what they did? What was an officer to think when he had to interrupt the patrol assignment that his Sergeant had given him—checking door locks, watching known pickpockets, inspecting pawn shops, and so on—because the dispatcher wanted him to investigate the chickens in Mrs.

Cheeseborough's garden? Those tensions escalated as central communications staff pushed officers to deemphasize their crime prevention work to make them more accessible to dispatchers (e.g. ABF 1956: 10052, 11234), and they continued to erupt for decades (Rubinstein 1973: 80, 114; Schwartz *et. al.* 1975: 13-14; Moskos 2008: ch. 5).

Wilson's long-time mentor August Vollmer, who had preceded him as the most influential police leader in America, raised this problem in a report for the Portland Police Bureau in the 1940s. That agency had already established a system that routed all calls to the main switchboard, where a radio dispatcher decided whether to send an officer and what information to provide. Vollmer complained that this arrangement usurped the authority of the precinct supervisors who normally oversaw patrol officers, leaving them with no control over their officers' assignments and only as much information about their work as they could learn by monitoring the short radio broadcasts. Instead, Vollmer argued, phone calls should be routed to the precinct desk commander, who would "ascertain the exact nature of the case, confer with the station commander as necessary and instruct the radio dispatcher regarding patrol car assignments"-precisely the arrangement that PAS would soon criticize in Worcester. By retaining control over dispatching decisions, Vollmer insisted, precinct leadership could rely on their knowledge of current priorities and conditions in the area to ensure that emergency response complemented the precinct's other work and thereby "see that police effort is properly expended" (Vollmer 1947: 166-70).

Wilson and other advocates of centralized dispatching acknowledged the problem in principle. Influenced by mid-century theories of scientific management, Wilson conceded that police departments had to ensure unity of command: if multiple people could command the same officer, "the orders are not likely to be harmonious, and conflicting orders confuse subordinates

and prevent coordination of the efforts of the group." The apparent tension between the dispatcher's and Sergeant's orders seemed to be a prime example of this concern (Wilson 1950: 38-9, 52; cf Wilson 1942: 13; ICMA 1954: 390).

Wilson tried to neutralize this concern by reconceptualizing the nature of the dispatcher's role. He insisted that the tension that critics like Vollmer raised was more apparent than real, for dispatchers did not really exercise authority when they decided to dispatch a patrol car. To make that case, he distinguished two types of authority to issue commands: the familiar "line" variety of command authority, in which a manager has the power to make independent judgments about what to tell his subordinates to do; and what he called "staff command," in which a person who lacks any authority of their own issues orders on behalf of someone else—a person like the chief's secretary, "who says, in effect, 'the chief says that you shall do so and so'" (Wilson 1950: 50). Radio dispatchers were a prime example of staff command (indeed they were Wilson's *only* example; he apparently invented the category to address the problem they posed) (*Ibid.* 50-2). On Wilson's view, they served as a type of clerical staff to the police commanders who had established the dispatch policy they were expected to implement:

The dispatcher aids the commanding officers of all divisions in communicating their commands. He acts as an aide to each superior in command of officers in the field. He makes no actual decisions regarding an operation but merely classifies it and applies the routine procedures established by department regulations for this classification in the deployment and assignment of men (Wilson 1950: 50-1).

Wilson had already articulated key elements of this vision in his more specialized 1942 textbook, *Police Records* (Wilson 1942: 13-4). If precinct leadership believed that dispatchers were sidetracking their officers, he insisted, their recourse lay in the "department regulations" that governed dispatchers' decisions: "Departmental regulations governing these matters, drafted with the participation of the heads of the operating divisions, will safeguard their interests," he explained to the frustrated precinct leaders (Wilson 1942: 13-4). In fact, however, "departmental regulations governing these matters" were thin to nonexistent, as described earlier: Wilson's argument appealed to a set of organizational rules governing dispatch choices that simply did not exist. (As Lieutenant's Jett's sputtering response to questions about how to define an "emergency" worthy of a police response at the IACP conference a few years earlier had suggested, it wasn't clear that such rules *could* be formulated.) Wilson briefly acknowledged the existence of discretion, conceding that some cases that dispatchers had to handle "are not covered by regulations," but he thought those cases were rare—limited to "unusual or emergency situations" that could usually be referred to the commanding officer on duty (Wilson 1950: 50-1).

Despite the manifest flaws of Wilson's account, it provided reformers with a principled response to concerns like Vollmer's—a rationale for ignoring the authority that dispatchers and call-takers actually exercised that was grounded in the fiction that their decisions were regulated by departmental policies. Wilson and his PAS colleagues invoked that fiction repeatedly when they recommended the centralization of dispatching in several cities, presumably to rebut the kind of objection that Vollmer had raised in Portland. For example, in a PAS report to the city of Hartford, Wilson wrote that "the dispatchers are not personally in command of patrolmen, traffic officers, and detectives on the street but serve only as transmitting agents for orders emanating from the division commanders. General rules and policies should be drafted by the Chief of Police and superior officers to guide the dispatcher in making general decisions" (PAS 1942: 120). His model seemed to become conventional wisdom in the field. For example, the ICMA's *Municipal Police Administration* similarly separated call-taking and dispatch from patrol operations as a distinct "staff" unit (ICMA 1954: 387-8, see Gay, Schell, and Shack 1978: 81-2),

and communications manuals for local police departments across the country adopted Wilson's language (*e.g.* City of Huntington 1965: 2).

This conceptualization of the dispatcher's role, which denied that it involved any exercise of discretion, was a significant step in establishing the modern call-for-service system. Along with the organizational relocation of the dispatch function from the precincts to headquarters, it insulated the call-for-service system from other sources of authority that had previously intruded into it, forbidding officers and their immediate supervisors from countermanding orders from the dispatcher (e.g. City of Huntington 1965: 3). The caller now had a direct channel to the police officer on the beat, mediated only by centralized communications staff who were viewed as something akin to secretaries taking phone messages for their intended recipients.

<u>Civilianization</u>

As Wilson reconceptualized communications work as a type of clerical work, more and more agencies were handing it over to civilians—particularly female civilians. That shift both reflected and advanced the emerging consensus that call-taking and dispatching were ministerial functions. Discretion, to put it bluntly, was something that sworn, male officers exercised; only a ministerial role was suitable for civilian "girls."

As discussed above, the earliest communications systems had usually been staffed by sworn officers, but soon these officers were replaced by civilians, often women. Some police departments civilianized their own departmental call centers, while some did not civilianize until they established or joined a regional call center that received calls from many police jurisdictions (and often fire and EMS calls as well). Regardless of how or when it occurred, this transition was frequently rocky, and the tensions that erupted indicate what was at stake (e.g. Citizens Research 1942: 60; National Service to Regional Councils 1970: 7; Korczynski 1978; Scott 1981: 11). In

the mid-1950s, for example, the police chief of West Allis, Wisconsin, introduced civilian women as call-takers and dispatchers, explaining that he was "quite proud of the idea of using women radio operators" because it "refines" the culture of the communications center. The chief conceded, however, that the introduction of civilians had created "a little resentment on the part of the men because they don't think a woman capable of performing the function." To alleviate those concerns, the department restricted the women's authority significantly, instructing them to immediately turn all calls for police service over to the desk Sergeant on duty, who would decide how to respond to the call and then tell the dispatcher what message, if any, to broadcast over the radio. An ABF researcher reported that "these instructions are designed to prevent anyone other than a police officer from making what, essentially, is a police decision. It is being strictly enforced in view of the fact that the department is now in the process of shifting over to civilian employees (women) as radio operators" (ABF 1956: 10095, 10097, 10099, 10111, 10113). This temporary expedient of subjecting civilian dispatchers to the Sergeant's authority apparently alleviated resistance to civilianization in West Allis for the time being, but the pressure for centralization eventually eliminated such arrangements.

Since sworn personnel had so little faith in the knowledge and competence that civilians brought to police work, the shift to civilians had a significant impact on the perception and reality of communications work. As several studies beginning in the 1970s indicated, civilian communications staff had low status in the department, and patrol officers and managers often doubted that they could exercise judgment responsibly (Rubinstein 1971; Schwartz *et. al* 1975; Korczynski 1978; cf. Orosco and Gaub 2022); their job was to pass citizen calls on to police officers to let *them* sort things out, not to play a gatekeeping role for which they were unqualified. In that way, civilianization seems to have further eroded whatever discretion call-

takers and dispatchers still exercised. For example, when the San Francisco police department civilianized its communications center in 1972, the number of calls forwarded to the police immediately rose, while the rate at which call-takers resolved calls on their own sharply fell (Maxfield 1979: 119-21).

In short, with a loss of prestige to the job title and fewer trained policemen at the switchboard, police officials increasingly conceived of the phone operator function to be clerical—a matter of simply passing raw information from callers to police. When Eric Scott conducted his important study of call-takers and dispatchers in three cities during the 1970s, he reported that "their job is frequently conceptualized by police planners and managers as essentially clerical in nature" (Scott 1981: 11). Wilson's argument about the clerical nature of communications work did not bring this transformation about, but the transformation made his argument more plausible.

By the 1970s, the discretionary gatekeeping that dispatchers had conducted during the first years of police radio systems had declined substantially. When Jonathan Rubinstein conducted his intensive participant-observation study of the Philadelphia police department from 1969 to 1971, he paid close attention to the communications systems. "The phone man and the dispatcher are not allowed to decide whether a car should be dispatched," Rubinstein wrote (1973: 75-6). Other scholars echoed that conclusion (e.g. Scott 1981: 10). More recent studies document a similar norm cautious of discretionary gatekeeping in centralized call centers (though individual call-takers sometimes devise creative gatekeeping strategies to evade these norms) (Gillooly 2020b; Lum *et. al.* 2020). To be sure, call-takers and dispatchers clearly do screen out some calls even today, and members of marginalized communities have insisted that the 911 system often fails to take their concerns seriously (though usually the charge is not that

the call-takers deflect their requests entirely but that the police take too long to respond or fail to take their concerns seriously once they arrive) (*e.g.*, Carr, Napolitano, and Keating 2007; Brunson and Gau, 2015). To a significant degree, however, the modern call-for-service system does little to filter the wide-ranging demands that callers make for some kind of police response.

6. Conclusion

Complaints about the call-for-service system became widespread by the end of the 1960s, when emergency calls already dominated the police workload (Reiss 1971). Officers across the country felt overwhelmed with the work of responding to the constant barrage of demands that they could often do little about, and which left them little time and flexibility to engage in crime prevention work (Webster 1970: 98; Gay, Schell, and Schack 1977: 60). Influential scholarship about the character of police work in the late 1960s and 1970s struggled to define what, if anything, tied together the enormous variety of miscellaneous problems that officers were expected to manage (*e.g.* Cumming *et. al* 1965; Wilson 1968: ch. 2; Bittner 1970; Goldstein 1977: ch. 2). Those demands and expectations were neither an inherent feature of the police role nor the result of direct policy choices to assign such a wide range of problems to the police. They were the indirect result of a newly established organizational arrangement that gave callers largely unfiltered access to a police response whenever they wanted it. That arrangement already entangled the police in a remarkably wide range of social problems by the end of the 1960s.

Although the new communications technologies played an important role in this transformation of the police role, they did not bring it about on their own but only in combination with the organizational framework in which they eventually became embedded. To be sure, as soon as police radios made it possible to easily convey a caller's demands to a police car in the 1920s and 1930s, the public immediately tried to use that new capability to make demands that

the advocates of police radio had never envisioned, and the constant press of those demands generated tensions in policing that took decades to resolve. Some (though not all) police leaders and reformers were inclined to capitulate to those demands because they wanted to shore up public support for the police, but for many years their views did not matter very much because the call-for-service system was managed by people committed to the old policing practices who limited its impact. In that respect, the new communications technologies took their place in an emergent sociotechnical assemblage that was unstable and contentious, but one that did not yet alter policing as extensively as it eventually would. Real change happened only when police leaders and reformers extracted the work of managing calls from the existing organizational framework and re-established it somewhere new-when it became centralized, specialized, and civilianized. That shift did not emerge from a deliberate plan to empower anyone with a telephone to define the scope of the police mandate (indeed its main theorist, O.W. Wilson, denied that it had that implication) but from broader projects of centralization and administrative rationalization motivated by other goals. In practice, however, it insulated the call-for-service system from the influence of the commitments and assumptions of existing police officials and vested its key tasks in a new cadre of low-status specialists who received minimal guidance and support for the work they were being asked to do (which has always been more complex and significant than reformers recognized). That new sociotechnical assemblage established a protected channel between the individual caller and the responding officer.

That arrangement has had significant implications for the character of policing, for it isolates a particular kind of social interest and makes it the basis for distributing police intervention. In the form that emerged after the 1950s, the call-for-service system draws out the preferences that individuals have in their capacities as callers (rather than as suspects or as citizens) and conveys

them with minimal modification or filtering to officers in the field.⁶ In that respect, it elevates a different set of interests than either the mid-20th century system of embedded gatekeeping or the older mechanisms of political oversight that governed police mobilization before the advent of police radio did. In effect, it reduces "the public" to "the caller" (who does not need to take account of considerations beyond its own desires or perceptions, and whose demands are accepted largely unchallenged as a legitimate basis for police intervention).

Those who defend the modern call-for-service system often say that at least it is democratic, in that it limits police intervention only to those situations where it has been requested by at least one member of the public (e.g. Black 1973; Buerger 1998; Mullen 2016; Monaghan 2023: 92-4), but that claim rests on an overly thin conception of democracy. When the character of an agency's work is shaped more by retail demands made by private actors than by wholesale mandates crafted in public debate, the nature of public input into agency action has been fundamentally transformed. It no longer incorporates any attempt to reconcile private perceptions and desires with other social interests through rational scrutiny, reflection, or debate (cf. Habermas 1989; Goodin 2003; Elster 1986); it simply accepts them as brute preferences that can unilaterally justify state intervention.⁷ That arrangement has left us with a method of determining what kinds of situations warrant police intervention that is very difficult for the broader public to

⁶ To be sure, some contemporary call-takers have developed practices to mediate, interpret, and filter caller demands in important ways (Gillooly 2023), but the norms governing the contemporary call-for-service system do little to encourage or support their efforts. In that respect, dispatch centers still operate under the influence of a framework like the one that O.W. Wilson introduced even as the best call-takers and dispatchers work hard to move beyond it.

⁷ This feature of the contemporary call-for-service system is illustrated especially clearly by the way many dispatch centers define "suspicion" calls—for example, as "any incident/situation/person/vehicle that is determined to be suspicious in nature by the caller" (Self cite removed). A person or situation is "suspicious" just in case the caller deems it so; no objective justification for that judgment is required. Such a definition leaves the little recourse for call-takers who become wary of a caller's motivation or discernment.

govern; it has made it very difficult for the rest of us to exert much meaningful control over the scope of the police mandate.

In that respect, this case illustrates the complex and indirect ways in which the design of sociotechnical systems can erode democratic control over state action (cf. Winner 1977, 2020; Latour 1994). That complexity and indirection sometimes makes the political implications of new technologies seem inevitable, but Langdon Winner argues that the relevant concept is not technological determinism but technological somnambulism (Winner 2020: ch. 1). We are not swept away by the inevitable impacts of new technologies so much as we sleepwalk through the myriad decisions that have to be made about their design and use, eventually waking up somewhere we never intended to go. By reconstructing those decisions, historical study can restore a sense of contingency and possibility to the way we use the technologies that have transformed our world; it can help make them subject to political choice once again, this time with more awareness of what is at stake.

Possibilities for Reforming the Call-for-Service System

For those who want to reduce the scope of the police role, this article suggests that it will be necessary to confront the authority that the call-for-service system delegates to callers to unilaterally define the proper scope of police responsibility. By empowering call-takers and dispatchers to screen the calls they receive more vigorously, it may be possible to deflect some of the unjustified and sometimes harmful police contacts that have attracted so much public attention in recent debates (Lum et al 2020: 1190; Gillooly 2020a, 2020b); moreover, by integrating alternative response options into the 911 system and taking steps to ensure that calltakers will feel comfortable using them, it may be possible to divert some calls to unarmed alternatives to the police (Beck et al., 2022). As the most ambitious proposals of this type have

recognized, this agenda requires a wholesale reformulation of the call-taker and dispatcher roles—treating the people who fill those positions as professionals who must exercise discretion and judgment rather than the clerical functionaries that they became after the middle of the 20th century, with the expanded training, support, and pay that role implies (e.g. Lum et al 2020: 1190; Gillooly 2020b).

Our analysis clarifies the central problem that these reforms should target. What makes today's call-for-service system uniquely troubling is the way it extracts the raw, unfiltered preferences articulated by individual callers and makes them the basis for police intervention, even though such preferences clearly do not reflect the full range of social interests at stake.⁸ The problem is not simply that contemporary policing has become too reactive, and the solution is not necessarily to make it more proactive; the problem is the *kind* of reactive policing we have inherited from the mid-20th century. A defensible mechanism for incorporating individual demands into policing would need to do more than the current call-for-service system does to filter and evaluate them, bringing them into contact with the competing priorities and interests that police intervention would implicate. One important way to do that is to empower call-takers to deliberate with, challenge, and occasionally (if the caller and call-taker cannot reach a

⁸ Indeed, they do not necessarily reflect the full range of considerations that would be needed to justify *any* government intervention. Thoughtful observers of the police have often suggested that many calls to the police are an expression of unmet social needs, and if a police response does not seem appropriate, local governments should develop the capacity to meet those needs in some other way (Cumming *et. al.* 1965; Friedman 2021: 985; Western 2018:183). In some cases that may be correct. Our argument, however, implies that it is not *always* correct, since sometimes (such as some of the "suspicion" calls described in the previous footnote) these calls do not articulate truly *social* needs at all; they only articulate *individual preferences* for government intervention that may not seem justified once they have been subjected to the types of reflection, debate, and challenge that most political theories insist on as the basis for legitimate state action. For example, some institutions regularly call the police to manage difficult situations simply because it is convenient and free for them to do so; sometimes, the appropriate response to those demands is not to provide a wider menu of response options but to insist that those institutions have a duty to manage and prevent some of those problems on their own (Thacher 2022).

consensus about whether a police response is genuinely appropriate) even reject some of the demands that callers place on them.

Although these efforts to empower call-takers and dispatchers to play a more assertive role in managing public demands are worth pursuing, it is also worth considering the possibility that there is something more fundamental about the structure of the contemporary call-forservice system that makes it difficult to govern. The very idea of specialized call-taker and dispatcher roles located in centralized organizational units (and, later, in centralized units serving an entire region) is one of the contingent outcomes of the complex evolution we have described. In the middle of the 20th century, the call-taker and dispatcher roles were not just less clerical than they are today, but also more widely distributed and closely integrated into the formulation and implementation of police strategy. By contrast, many of the communications specialists who staff today's centralized call centers are highly capable, but they are organizationally isolated from the street-level expertise that police themselves develop in their work and from any sense of the way a particular request for service relates (or not) to broader priorities for neighborhood safety and policing strategy in the specific context where it arose. Organizing police work around a series of isolated calls makes it difficult to address the underlying problems that produce those calls (Goldstein 1990: 20); it can also make it difficult to evaluate the significance of each individual call as it comes in. Reformers can and should try to help call-takers and dispatchers make better decisions about the barrage of requests they receive each day, but they should also consider the possibility that the task the current structure assigns to communications workers may sometimes simply be intractable.⁹ The prevailing model of the call-for-service system has

⁹ For example, the call-for-service system might revisit some version of the model that prevailed in many mid-20th century police departments, which processed true emergencies—typically a very small portion of the total call volume—entirely in a central call center but then redirected other calls for service to patrol supervisors or other operational staff involved in the development and implementation of policing strategy. The arrangements described

become such an entrenched part of our understanding of what "policing" involves that it can be hard to imagine concrete alternatives, but comparative research into emergency dispatch systems in other countries or other policy domains may provide a useful way to do so.

The idea that every caller deserves a response—that anyone with a telephone can unilaterally make a claim on government resources—is not a fact of nature but a product of historical choices that were often myopic, and that in any case could have turned out differently. Those choices have now become sedimented in institutional arrangements that we take for granted, and which have made the police role resilient against efforts to restrain it.

earlier in this paper may be too specific to the organizational and technological environment of the mid-20th century to make sense today, but the basic insight might take a more contemporary form (e.g. Sparrow 1991), and a few police agencies have experimented with similar approaches (LASD 2023: Attachment B.1).

References

Adams, O.D. 1938. Training for the Police Service. Washington: USGPO.

- Agee, Christopher. 2013. The Streets of San Francisco. Chicago: Univ. Chicago Press.
- American Bar Foundation. 1956-57. The Administration of Criminal Justice in the United States, Study Records. Wisconsin Historical Society Archives, M2015-031. [cited by field note number]
- American Bar Foundation. 1958. "The Administration of Criminal Justice in the United States: Pilot Project Report", vols. 1-7, University of Michigan Law Library.
- American Municipal Association. 1940. "Motorized Police Patrol—One-Man or Two-Man Cars?" Report No. 140 of the American Municipal Association, August.
- Anonymous. 1937. "Noteworthy Police Work Accomplished By Radio Cars", mss. circulated at the 4th National Convention of the Associated Police Communication Officers, Oct. 11-14, 1937, New York City, NY. Donald S. Leonard Papers, Bentley Library, Box 30.
- Balto, Simon. 2019. Occupied Territory. Chapel Hill: Univ. North Carolina Press.
- Beck, Jackson, Aaron Stagoff-Belfort, and Jason Tan de Bibiana. 2022. *Civilian Crisis Response: A Toolkit for Equitable Alternatives to Police*. New York: Vera Institute of Justice.
- Bell, Monica. 2016. "Situational Trust: How Disadvantaged Mothers Reconceive Legal Cynicism." *Law and Society Review* 50: 314-47.
- Bittner, Egon. 1970. The Functions of the Police in Modern Society. Chevy Chase: NIMH.
- Black, Donald. 1973. "The Mobilization of Law." The Journal of Legal Studies 2: 125-49.

Boston Daily Globe. 1884. "Among the Very Finest." Dec 24, p. 1.

- Boston Finance Commission. 1941. *Report Relating to the Cost of Police Service in the City of Boston.* Boston: City of Boston Printing Department.
- Brayne, Sarah. 2021. Predict and Surveil. New York: Oxford Univ. Press.
- Brunson, Rod and Jacinta Gau. 2015. "Officer Race Versus Macro-Level Context: A Test of Competing Hypotheses About Black Citizens' Experiences With and Perceptions of Black Police Officers." *Crime & Delinquency* 61: 213-242.
- Buerger, Michael. 1998. "The Politics of Third Party Policing." *Crime Prevention Studies* 9: 89-116.

- Bureau of Municipal Research. 1943. "Police Problems in Newark." New York: Bureau of Municipal Research. Selected Surveys of Urban Police reprinted by the New York Times and Arno Press, 1971.
- Bureau of Public Affairs. 1946. *Survey of the police department of Creston, Iowa*. Iowa City: State University of Iowa.
- Byers, H.O. 1951. "Police Communications Administration", in *Fifth Annual Peace Officers Training School: A Report.* Lawrence: Univ. Kansas Bureau of Governmental Research.
- Callon Michel. 1984. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay." *Sociological Review* 1 (suppl.): 196-233.
- Callon, Michel. 1985. "Society in the Making: The Study of Technology as a Tool for Technological Analysis", in eds. Wiebe Bikjer, Thomas Hughes, and Trevor Pinch. *The Social Construction of Technological Systems*. Cambridge: MIT Press, pp. 83-103.
- Callon, Michel. 1986. "The Sociology of an Actor-Network: The Case of an Electric Vehicle", in eds. Michel Callon, John Law, and Arie Rip. *Mapping the Dynamics of Science and Technology*. London: Macmillan, pp. 19-34.
- Campesi, Giuseppe. 2016. A Genealogy of Public Security: The Theory and History of Modern Police Powers. London: Routledge.
- Carr, Patrick, Laura Napolitano, and Jessica Keating. 2007. "We Never Call the Cops and Here is Why: A Qualitative Examination of Legal Cynicism in Three Philadelphia Neighborhoods." *Criminology* 45: 445-480.
- Carte, Gene, and Elaine Carte. 1975. Police Reform in the United States: The Age of August Vollmer, 1905-1932. Los Angeles: Univ. California Press.
- Cheng, Tony. 2020. "Input without Influence: The Silence and Scripts of Police and Community Relations, Social Problems." *Social Problems* 67: 171-189.
- Cheng, Tony. 2022. "The Cumulative Discretion of Police over Community Complaints." American Journal of Sociology 127: 1782-1817.
- Chicago Tribune. 1880. "Police Alarms." Dec. 19, p. 10.
- Churchill, David. 2017. Crime Control and Everyday Life in the Victorian City. New York: Oxford Univ. Press.
- Citizens Research, Inc. 1942. The Columbus Police Study. Columbus, Ohio: Author.
- Citizens Police Committee. 1931. Chicago Police Problems. Chicago: Univ. Chicago Press.
- City of Huntington Police Department. 1965. Communications Manual. Gil Kleinknecht collection, Marshall University, Series 2, Folder 3.

- Colquhoun, Patrick. 1797/2012. A Treatise on the Police of the Metropolis. New York: Cambridge Univ. Press.
- Cumming, Elaine, Ian Cumming, and Laura Edell. 1965. "Policeman as Philosopher, Guide and Friend." *Social Problems* 12: 276-86.
- Dennis, Brady, Mark Berman, and Elahe Izadi. 2016. "Dallas police chief says 'We're asking cops to do too much in this country." *The Washington Post*, July 11.
- Detroit Free Press. 1884. "Nearly Ready." Nov. 16.
- Elster, Jon. 1986. "The Market and the Forum: Three Varieties of Political Theory" in eds. Jon Elster and Aanund Hyland, *Foundations of Social Choice Theory*. New York: Cambridge University Press, pp. 103-32.
- Felker-Kantor, Max. 2018. Policing Los Angeles. Chapel Hill: Univ. North Carolina Press.
- Fischer, Claude. 1992. America Calling: A Social History of the Telephone to 1940. Berkeley: Univ. California Press.
- Fogelson, Robert. 1977. Big-City Police. Cambridge, Mass.: Harvard Univ. Press.
- Footer, Katherine, *et al.* 2019. "Police-Related Correlates of Client-Perpetrated Violence Among Female Sex Workers in Baltimore City, Maryland." *American Journal of Public Health* 109: 289-295.
- Forman, James. 2017. Locking Up Our Own. New York: Farrar, Strauss, and Giroux.
- Fosdick, Raymond. 1920. American Police Systems. New York: The Century Co.
- Friedman, Barry. 2021. "Disaggregating the Policing Function." University of Pennsylvania Law Review 169: 925-99.
- Fulambarker, Anjali. 2020. "Everybody Loses': Understanding Police Roles and Perceptions of Domestic Violence Calls." Journal of Qualitative Criminal Justice & Criminology 8: 1-17.
- Gay, William, Theodore Schell and Stephen Schack. 1977. *Improving patrol productivity: Routine patrol, Volume I.* Washington: USGPO.
- Gillooly, Jessica. 2020a. "How 911 Callers and Call-takers Impact Police Encounters with the Public: The Case of the Henry Louis Gates Jr. Arrest." *Criminology and Public Policy* 19: 787-803.
- Gillooly, Jessica. 2020b. "911, Is This an Emergency?": How 911 Call-Takers Extract, Interpret, and Classify Caller Information. Ph.D. Dissertation, University of Michigan.
- Gillooly, Jessica. 2023. "Collaborative Gatekeeping: Consensus-Seeking Practices Among Emergency Call-Takers", *Policing: A Journal of Policy and Practice* 17: 1-10.

Goldstein, Herman. 1977. Policing a Free Society. Cambridge, Mass.: Ballinger.

Goldstein, Herman. 1990. Problem-Oriented Policing. New York: McGraw Hill.

Goodin, Robert. 2003. Reflective Democracy. New York: Oxford Univ. Press.

- Gourley, G. Douglas, and Allen Bristow. 1961. Patrol Administration. Springfield, Ill.: Charles Thomas.
- Habermas, Jürgen. 1989. *The Structural Transformation of the Public Sphere*. Cambridge: MIT Press.
- Harrison, Leonard. 1934. Police Administration in Boston. Cambridge: Harvard Univ. Press.
- Herbert, Steve. 2006. *Citizens, Cops, and Power: Recognizing the Limits of Community.* Chicago: Univ. Chicago Press.
- Herring, Christopher. 2019. "Complaint-Oriented Policing: Regulating Homelessness in Public Space." *American Sociological Review* 84: 769-800.
- Hinton, Elizabeth. 2016. From the War on Poverty to the War on Crime. Cambridge: Harvard Univ. Press.
- Hinton, Elizabeth, and DeAnza Cook. 2021. "The Mass Criminalization of Black Americans: A Historical Overview." *Annual Review of Criminology* 4: 261-86.
- Hughes, Thomas. 1983. Networks of Power: Electrification in Western Society, 1880-1930. Baltimore: Johns Hopkins Univ. Press.
- International Association of Chiefs of Police (various years). The Police Yearbook.
- International City Management Association. 1954. *Municipal Police Administration*. Chicago: Author.
- Institute for Public Administration. 1937. A Survey of the Bureau of Police, Department of Public Safety, Pittsburgh, PA. New York: Author.
- Jones, C.R. and H.E. Earl. 1933. "Survey: Radio Equipped Patrol Cars for the Department of Sheriff of the County of Los Angeles, California", Bureau of Efficiency of the County of Los Angeles.
- Jones, Trevor, Tim Newburn, and David Smith. 1994. *Democracy and Policing*. London: Policy Studies Institute.
- Justice Policy Institute. 2011. *Education under arrest: The case against police in schools*. Washington, DC: Author.
- Koehler, Johann, and Tony Cheng. 2023. "Settling Institutional Uncertainty: Policing Chicago and New York, 1877-1923." *Criminology* 61: 518-545.

Korczynski, James. 1978. "Civilians in the Police Function." Law and Order, April.

Lane, Roger. 1967. Policing the City: Boston, 1822-1885. Cambridge: Harvard University Press.

- Langton, Lynn, and Matthew Durose. 2011. "Study finds some racial differences in perceptions of police behavior during contact with the public". NCJ 242938. Bureau of Justice Statistics. Available at https://www.bjs.gov/content/pub/press/pbtss11rpa11pr.cfm.
- Latour, Bruno. 1994. "On Technical Mediation." Common Knowledge 3: 29-64.
- Latour, Bruno. 2007. Reassembling the Social. New York: Oxford Univ. Press.
- Leonard, D.A. 1944. Testimony Before the Federal Communications Commission, Washington DC. Donald Leonard papers, Bentley Library.
- Leonard, V.A. 1938. Police Communications Systems. Berkeley: Univ. California Press.
- Los Angeles Sheriff's Department. 2023. "Notice of Revised Request for Proposals 499-SH for Computer Aided Dispatch Services." <u>https://lasd.org/wp-</u> <u>content/uploads/2023/06/Solicitations_RFP499-SH_15_Attachments_B.1-</u> <u>B.3_060623.pdf</u>
- Lum, Cynthia, et. al. 2020. "Constrained Gatekeepers of the Criminal Justice Footprint: A Systematic Social Observation Study of 9-1-1 Call-takers and Dispatchers." *Justice Quarterly* 37: 1176-1198.
- Lvovsky, Anna. 2021. Vice Patrol. Chicago: Univ. Chicago Press.
- Mason, Frank. 1902. "The Telephone in the Police Department." Am. Telephone Journal 5: 52-3
- Maxfield, Mike. 1979. *Discretion in the Delivery of Police Services*. Ph.D. Dissertation, Northwestern University.
- Monaghan, Jake. 2023. Just Policing. New York: Oxford Univ. Press.
- Monkkonen, Eric. 1981. Police in Urban America: 1880-1920. New York: Cambridge Univ. Press.
- Monroe, David. 1940. Administration of the Police Function in Cook County. Ph.D. Dissertation, Northwestern University Department of Political Science.
- Moskos, Peter. 2008. Cop in the Hood: My Year Policing Baltimore's Eastern District. Princeton: Princeton University Press.
- Mullen, Tom. 2016. "A Practical Solution: Rule Police Departments Like Fire Departments." *Huffington Post*, July 27.
- National Service to Regional Councils. 1970. For Help Dial-911: Summary Report. Washington, DC: Author.

- Neusteter, S. Rebecca, Megan O'Toole, Mawia Khogali, Abdul Rad, Frankie Wunschel, Sarah Scaffidi, Marilyn Sinkewicz, Maris Mapolski, Paul DeGrandis, Daniel Bodah, and Henessy Pineda. 2020. *Understanding police enforcement: A multicity 911 analysis*. New York: Vera Institute of Justice.
- New York Times. 1881. "The Police of Different Cities." Aug 30, p 3
- New York City Police Department. 1895. Manual Containing the Rules and Regulations of the Police Department of the City of New York.
- Olander, Oscar. 1941. A Guide to the Operations of the Michigan State Police Communications System. Donald S. Leonard Papers, Bentley Library, Box 14.
- Orlikowski, Wanda. 2000. "Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations." *Organization Science* 11: 404-28.
- Orlikowski, Wanda. 2007. "Sociomaterial Practice: Exploring Technology at Work." *Organization Studies* 28: 1435-48.
- Parker, William. 1949. *Daily Training Bulletin of the Los Angeles Police Department*. Springfield, Ill.: Charles Thomas Publishers.
- Providence Governmental Research Bureau. 1933. Survey and report on the Providence Police department. Providence, RI: Author.
- Public Administration Service. 1937. Survey of the Police Department of Greenwich, Connecticut. Chicago: Author.
- Public Administration Service. 1942. Report of Police Department Survey, Hartford, Connecticut. Chicago: Author.
- Public Administration Service. 1946. Survey of the Police Department of San Diego. Chicago: Author.
- Public Administration Service. 1952. Police services in Worcester, Massachusetts. Chicago: Author.
- Reiss, Albert. 1971. The Police and the Public. New Haven: Yale Univ. Press.
- Reiss, Albert. 1992. "Police Organization in the 20th Century." Crime and Justice 15: 51-97.
- Richardson, James. 1974. Urban Police in the U.S. Port Washington, NY: Kennikat Press.
- Rios, Victor. 2011. Punished. New York: NYU Press.
- Rocha Beardall, Theresa. 2022. "Police Legitimacy Regimes and the Suppression of Citizen Oversight in Response to Police Violence." *Criminology* 60: 1-26.

- Rolfe, Charles. 1892. "History of the Police Patrol Telegraph", paper presented to the Meeting of the International Police Association, St. Louis, Missouri.
- Rubinstein, Jonathan. 1973. City Police. New York: Farrar, Straus, and Giroux.
- Rutledge, William. 1929. "Radio in Police Work", Address Delivered before the IACP Annual Meeting, Atlanta, Georgia, June 4. Donald S. Leonard Papers, Bentley Library, Box 30.
- Schwartz, Alfred, et. al. 1975. Employing Civilians for Police Work. Washington: U.S. Department of Justice.
- Scott, Eric. 1981. *Calls for Service: Citizen Demand and Initial Police Response*. Washington, DC: National Institute of Justice.
- Selby, Nick, Ben Singleton, and Ed Flosi. 2016. In Context: Understanding Police Killings of Unarmed Civilians. St. Augustine: Contextual Press.
- Shenefield, H.T. 1931. "How the Radio Aids Police Work." *National Municipal Review* 20: 267-271.
- Simon, Jonathan. 2007. Governing through Crime. New York: Oxford Univ. Press.
- Sklansky, David. 2008. Democracy and the Police. Stanford: Stanford Univ. Press.
- Sparrow, Malcolm. 1991. "Information Systems: A Help or Hindrance in the Evolution of Policing?" *Police Chief*, April, pp. 26-44.
- Spelman, William, and Dale Brown. 1981. *Calling the Police: Citizen Reporting of Serious Crime*. Washington: National Institute of Justice.
- Steinberg, Allen. 2014. *The Transformation of Criminal Justice: Philadelphia, 1800-1880* Chapel Hill: Univ. North Carolina Press.
- Stone, Donald. 1933. "Practical Use of Police Records System." *Journal of Criminal Law and Criminology* 24: 668-78.
- Takei, Carl. 2018. "How Police Can Stop Being Weaponized by Bias-Motivated 911 Calls." *ACLU Blog* (blog). June 18, 2018. https://www.aclu.org/blog/racial-justice/race-andcriminal-justice/how-police-can-stop-being-weaponized-bias- motivated.
- Thacher, David. 2001. "Conflicting Values in Community Policing", 35 Law and Society Review 765-798.

Thacher, David. 2022. "Shrinking the Police Footprint." Criminal Justice Ethics 41: 62-85.

Thale, Christopher. 2007. "The informal world of police patrol: New York City in the early twentieth century". *Journal of Urban History* 33: 183-216.

- Uchida, Craig. 2021. "The Development of American Police", in eds. Robert Dunham, George Alpert, and Kyle McLean. *Critical Issues in Policing*, 8th ed. Long Grove, Ill.: Waveland Press, pp. 11-30.
- Vitale, Alex. 2008. City of Disorder. New York: NYU Press.
- Vitale, Alex. 2017. The End of Policing. New York: Verso.
- Vollmer, August. 1936. The Police and Modern Society. Berkeley: Univ. California Press.
- Vollmer, August. 1947. *Police bureau survey, city of Portland, Oregon*. Portland: Bureau of Municipal Research and Service, Portland branch, University of Oregon.
- von Hoffman, Alexander. 1992. "An Officer of the Neighborhood: A Boston Patrolman on the Beat in 1895." *Journal of Social History* 26: 309-330
- Walker, Samuel. 1979. A Critical History of Police Reform. Lexington: Lexington Books.
- Walker, Samuel. 1984. "Broken Windows' and Fractured History." Justice Quarterly 1: 75-90.
- Walker, Samuel. 1992. "Origins of the Contemporary Criminal Justice Paradigm: The American Bar Foundation Survey, 1953-1969." *Justice Quarterly* 9: 47-76.
- Webster, John. 1970. "Police Task and Time Study." *The Journal of Criminal Law, Criminology,* and Police Science 61: 94-100
- Western, Bruce. 2018. *Homeward: Life in the Year After Prison*. New York: Russell Sage Foundation.
- Wilentz, Sean. 1979. "Crime, poverty and the streets of New York City: the diary of William H. Bell, 1850–1851." *History Workshop* 7: 126-131.
- Willemse, Cornelius. 1931. Behind the Green Lights. New York: Alfred A. Knopf.
- Wilson, James Q. 1968. Varieties of Police Behavior. Cambridge, Mass.: Harvard Univ. Press.
- Wilson, O.W. 1940. "The Police and the Public." The Police Journal 13: 80-90
- Wilson, O.W. 1942. Police Records. Chicago: Public Administration Service.
- Wilson, O.W. 1950. Police Administration. New York: McGraw-Hill.
- Winner, Langdon. 1977. Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought. Cambridge, Mass.: MIT Press.
- Winner, Langdon. 2020. The Whale and the Reactor. Chicago: Univ. Chicago Press.
- Woelfle, John. 1936. "The Problem of Police Radio In Essex County." Essex County Courthouse, Report #1, April 2.