INTRODUCTION

The City of Extremes

Thursday, 14 July 1995, was the hottest day in Chicago's recorded history, but the weather is only one of the reasons that Joseph Laczko died alone in his home soon afterward. Laczko, a sixty-eight-year-old man of Hungarian descent, lived by himself in an apartment on the city's Northwest Side. Although he had few visitors, Laczko apparently staved off loneliness by collecting his neighbors' unwanted mail and filling his home with phone books, old newspapers, and shoddy furniture.[1] Laczko preserved order amidst the chaos of broken radios and piled seat cushions by keeping a calendar, in which he recorded the daily temperature and noted the news stories that moved him. On 15 July he entered "94 degrees" in the book. On 16 July he was dead.

Aside from the calendar, investigators from the Office of the Cook County Public Administrator who searched Laczko's home for contact information about friends or family found only a few signs of a social life. Laczko kept a couple of letters sent to him from Hungary in the 1980s; a bank statement showing that his last withdrawal, on 1 July, brought his account down to less than a thousand dollars; a group of letters from legal cases in which he had been involved in the 1980s and early 1990s; and an Easter card he had written in 1991 but never sent. Most of Laczko's papers were taken to the Public Administrators Office, and the staff would later use them in their efforts to track down someone interested in claiming his possessions.

In their report, the investigators listed the results of their inquiry: "Unfurnished one bedroom apartment. Complete mess. . . . Living room: 4 chairs, 2 stereos, 2 stools, boxes, misc papers, junk, garbage. Bedroom: wardrobe, 1 single bed, 3 dressers, misc clothing, papers, garbage. Dining room: 1 dresser, 1 film projector, 1 table, garbage. Family: 0." They took two instant photographs, consulted with Laczko's landlord, and left for their next job. "There was so much to do that

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we lost all idea of time," an investigator on Laczko's case remembered. "We'd hit the streets and we just kept going until nightfall. We were so crushed that we had to write our reports from the field." It was the busiest week ever experienced by the Public Administrators Office, which is in charge of managing the estates of unclaimed decedents. Dozens of cases that would be similar to Laczko's remained.

Cook County officials brought Laczko's corpse to the morgue, where the intake staff of pathologists assembled by Chief Medical Examiner Edmund Donoghue was racing to keep up with the demand. After examining the body, pathologists determined that Laczko had died of artherosclerotic cardiovascular disease and heat stress. They penned these findings on his death certificate, entered his records into a computer database, and moved his cadaver into storage. The office waited for Laczko's next of kin to take care of his remains, but no one ever came. When it was clear that the body would never be claimed, the Public Administrators Office used funds from Laczko's bank account to have a private funeral home arrange for his interment in a cemetery nearby.

Solitary at the end of life, Laczko was joined by hundreds of other Chicago residents who died alone during the heat wave and were assisted by two potentially life-saving interventions—attention from state-sponsored service providers and artificial cooling—only after their bodies were delivered to the Cook County Morgue. Just a minority of the victims, including a mother and child who succumbed together and two sisters who lived in the same building, perished with company nearby. Hundreds died alone behind locked doors and sealed windows that entombed them in suffocating private spaces where visitors came infrequently and the air was heavy and still. Among these victims, the bodies and belongings of roughly 170 people went unclaimed until the Public Administrators Office initiated an aggressive campaign to seek out relatives who had not noticed that a member of their family was missing. Even then, roughly one-third of the cases never moved beyond the public agency. The personal possessions of dozens of the heat wave victims, including Laczko, remain filed in cardboard boxes at the County Building to this day.

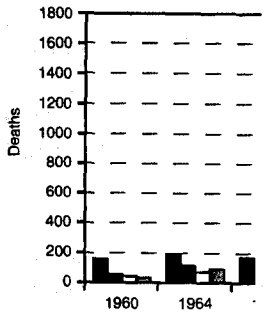
THE SOCIAL AUTOPSY

In the years following the heat wave, several political commissions and city leaders have dismissed the solitary deaths of Laczko and the hundreds of other Chicagoans as anomalous and abnormal. The catastrophic week in July, they argue, was a freakish disaster that shows little more than our human frailty to the whims of nature. Immediately after the heat wave, for example, Mayor Richard M. Daley appointed a large

commission to study, in its words, "the epidemiological, meteorological, and sociological aspects of the heat wave." The commission's major findings are summarized in the beginning of its report: "The heat wave was a unique *meteorological event* caused by a rare convergence of critical factors" (italics added), which it specifies as (1) a heat index above 100 degrees daily, including two consecutive days over 115 degrees; (2) cloudless skies with little night cooling; and (3) an *urban heat island effect**—whereby the concentration of buildings and pavement attracts and traps the heat—that heightened the temperature within the city. The subsection entitled *Why Heat Can Be Fatal* explains simply that "the link between human physiology and environment is delicate and pivotal. When body temperature rises enough above the normal range, heat injury occurs. Severe heat injury is fatal."[2] Social factors receive no attention in this crucial part of the report.

What the commission also buried in its publication is the connection between its work and the heat wave, since the title, *Final Report: Mayor's Commission on Extreme Weather Conditions,* makes no reference to the trauma it assesses. Disguised as a general statement about the weather, the report helped the city government hide its own public statement about the disaster by publishing it under another name. This strategic move was typical of the public and the political response to the crisis. Although the death toll from the one-week heat wave is unprecedented in U.S. history, the collective response to the trauma

* The climates of cities are generally different from the weather systems in the areas surrounding them, and the urban heat island effect refers to the elevated temperatures typical in urban spaces. According to a classic article by William Lowry (1967), "the city itself is the cause of these differences." Lowry identifies five principal causes for the city's exceptional climate: (1) "The predominantly rocklike materials of the city's buildings and streets can conduct heat about three times as fast as it is conducted by wet, sandy soil"; (2) "the city's structures have a far greater variety of shapes and orientations than the features of the natural landscape. The walls, roofs, and streets of a city function like a maze of reflectors, absorbing some of the energy they receive and directing much of the rest to other absorbing surfaces"; (3) "the city has many sources of heat that the countryside either lacks or has in far smaller numbers. Among them are factories, vehicles, and even air conditioners, which of course must pump out hot air in order to produce their cooling effect"; (4) "the city has distinctive ways of disposing of precipitation [with] drainpipes, gutters, and sewers. . . . Because there is less opportunity for evaporation in the city, the heat energy that would have gone into the process is available for heating the air"; and (5) "the air in the city is different in that it carries a heavy load of solid, liquid, and gaseous contaminants. . . . Although these particles collectively tend to reflect sunlight, thereby reducing the amount of heat reaching the surfaces, they also retard the outflow of heat" (Lowry 1967, 15–17).



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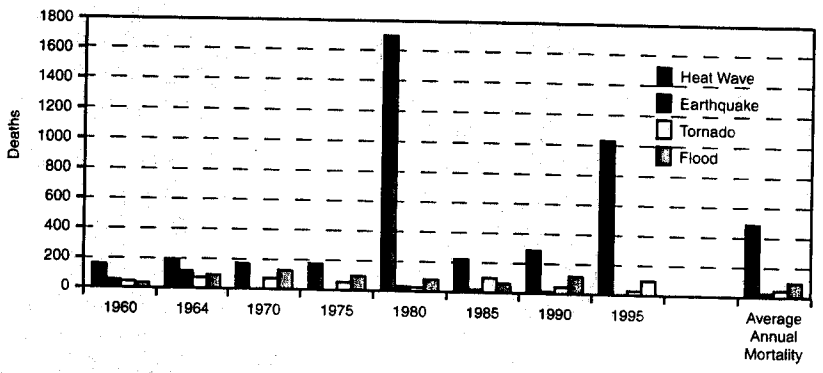

Figure 10. United States disaster mortality, 1960–95. Sources: heat wave, Vital Statistics of the United States; earthquake, USGS National Earthquake Information Center; tornado and flood, the National Oceanic and Atmospheric Administration.

has been marked by a will not to know the reasons that so many people died.[3]

Such treatment is not unusual. Given the attention that we pay to spectacular and camera-ready disasters such as hurricanes, earthquakes, tornadoes, and floods, Americans are often surprised to learn that in the United States more people die in heat waves than in all other extreme meteorological events *combined* (fig. 10). Heat waves receive little public attention not only because they fail to generate the massive property damage and fantastic images produced by other weather-related disasters, but also because their victims are primarily social outcasts—the elderly, the poor, and the isolated—from whom we customarily turn away.[4] Silent and invisible killers of silenced and invisible people, the social conditions that make heat waves so deadly do not so much disappear from view as fail to register with newsmakers and their audiences—including social scientific experts on disasters.[5] The introduction to a recent anthology of essays on urban disasters, for example, lists the most deadly urban events of the 1980s and 1990s, but inexplicably excludes the Chicago heat wave—and indeed all other American heat waves—even though the 1995 catastrophe killed more than ten times the number of people as the deadliest disaster in the table, the 1989 San Francisco Bay earthquake.[6]

In contrast with the public reluctance to look closely at the causes of Chicago's summer trauma, scientists from a range of fields have been drawn to study the heat wave because the prevalence and patterns of mortality defy easy explanation. As public health researchers have

shown, the morbidity and mortality rates from the urban inferno surpass the levels predicted by standard scientific models. In analyzing the heat wave, medical and meteorological scientists discovered a series of puzzles that they have been working to solve for years. Why, for example, did so many Chicagoans die alone? Why was the overall death toll higher than meteorological models would predict? Why did some neighborhoods and groups experience greater devastation than others? And why did the support systems designed to protect vulnerable city residents fail to work? Unfortunately, the methods and theories used in conventional health and climate studies deprive scientists of the instruments they need to conduct a thorough investigation. There is little in their professional tool kit to help explain the social sources of the disaster. Although every major study and report has found that medical and meteorological approaches are inadequate to explain why so many Chicago residents died, no one has analyzed how the city's social environment contributed to the devastation.

This book is driven by two overarching concerns. First, it examines the *social conditions* that made it possible for hundreds of Chicago residents—most of them old, alone, and impoverished—to die during the one-week heat spell. As in Kai Erikson's *Everything in Its Path,* the social autopsy draws upon a wide range of social scientific studies, sifting "through the store of available sociological knowledge to see what light it might shed on a single human event."[7] Despite the insistence of several political commissions and journalistic stories that the heat wave fatalities were dispersed throughout the city—that the "casualties of heat," as a *Chicago Tribune* headline put it, were "just like most of us," or, as the *Sun-Times* proclaimed, "they were as varied as victims of a plane crash"—the patterns of mortality reflect the inequalities that divide Chicago.[8]

The victims were primarily elderly: 73 percent of the heat-related casualties were older than sixty-five years of age (table 1). African Americans had the highest proportional death rates of any *ethnoracial* group.[9] They were significantly more vulnerable to the catastrophe than whites, with a death ratio of 1.5:1 in the total, age-adjusted population* (table 2), 1.8:1 for middle-aged victims (aged fifty-five to

* Age-adjustment is the statistical technique in which the age distributions of specific populations are standardized so that the experience of those populations—in this case, heat-related mortality—can be compared in light of their age differences. For further information about age-adjustment in the analysis of mortality rates, see the National Center for Health Statistics Web site: <www.cdc.gov/nchs/datawh/nchsdefs/ageadjustment.htm#Mortality>.

Table 1. Total Heat
Residents

Age	Whit
<55	27
55–64	25
65–74	62
75–84	90
85+	48
Total	252

Source: City of Chicago, I

Table 2. Age-Specif
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<55	
55–64	3
65–74	7
75–84	11
85+	22
Total*	1

Source: Whitman, et al. (
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Table 1. Total Heat-Related Deaths by Age and Race/Ethnicity: Chicago Residents

Age	White	Black	Latino	Other	Total
<55	27	39	1	0	67
55–64	25	45	4	1	75
65–74	62	64	1	0	127
75–84	90	66	1	2	159
85+	48	42	2	1	93
Total	252	256	9	4	521

Source: City of Chicago, Department of Public Health.

Table 2. Age-Specific and Age-Adjusted Heat-Related Death Rates per 100,000 Population, by Race/Ethnicity: Chicago Residents, July 1995

Age	Non-Hispanic White	Non-Hispanic Black	Ratio: Black/White
<55	4	5	1.3
55–64	31	57	1.8
65–74	75	83	1.1
75–84	119	176	1.5
85+	222	429	1.9
Total*	11	17	1.5

Source: Whitman, et al. (1997, 1516).
* Standardized to the 1940 U.S. population.

sixty-four years), and 1.9:1 for very old victims (aged eighty-five years or older). Indeed, although several officials and journalists emphasized the virtual parity in numbers of heat-related deaths between African Americans and whites, there was no age group in which African Americans did not have the highest proportional death rates in the city. These stratified mortality figures reflect typical patterns in Chicago, where African Americans daily face higher risks of death than whites, as well as typical patterns of heat wave death. In contrast, Latino Chicagoans, whose overall level of poverty placed them at a heightened risk of mortality, experienced a surprisingly low death rate. Although they constituted at least 23 percent of the city's population in 1995, they represented only 2 percent of the heat wave deaths. Accounting for this "Latino health paradox," whereby Latinos experience better outcomes or conditions than their collective deprivation leads public health scholars to predict, is one of the challenges for the social autopsy.[10]

There was also a significant and surprising difference in the mortality levels for men and women. Fifty-five percent of the heat-related

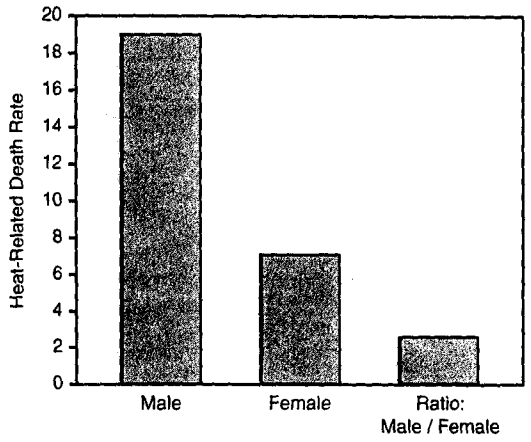

Figure 11. Age-adjusted heat-related death rates per one hundred thousand residents, by sex. Source: City of Chicago, Department of Public Health.

deaths were men and 45 percent were women; the age-adjusted death rates show that when the age factor is controlled, men were more than twice as likely as women to die (fig. 11). These patterns vexed some experts on aging, because elderly women are so much more likely than their male counterparts to live by themselves that many gerontologists consider aging alone to be a women's issue. Men's relatively high death rates are even more confusing when viewed in the context of gerontologist Hamilton Gibson's finding that women are more likely than men to report feeling lonely and isolated.[11] The pattern begs for explanation.

In addition to these group-level differences, there were also sharp contrasts in the prevalence of death among Chicago community areas.[12] In the city famous for the extent to which its spatial order reflects the social division of its residents, the geography of vulnerability during the heat wave was hauntingly similar to the everyday ecology of inequality. Heat wave deaths were concentrated in the low-income, elderly, African-American, and violent regions of the metropolis. The individual-level and population-based studies so common in epidemiology and demography explain only part of these geographical patterns. Social ecology, and its influence over the ways in which people interact and use public space, played a role that bears further investigation.

TOWARD A SOCIAL EPIDEMIOLOGY OF THE CITY

The group- and community-level death rates are simple portraits that begin to illustrate the impact of the heat; they suggest that the heat

wave was an environmentally stimulated but socially organized catastrophe that sociological investigation can help decipher. The social autopsy dissects the underlying relations of the event by drawing upon but also extending the legacy of social epidemiology.[13] The analysis here departs from conventional demographic and sociological studies of mortality by placing the individual-level factors that affect death rates within a broader context of neighborhoods, social service systems, and government programs. Treating the city itself as the focal point of the study, it advances a multilayered analysis that integrates political, economic, and cultural factors with the individual- and community-level conditions that are prevalent in epidemiological reports.[14]

It is impossible to understand the deprivation that led to so many deaths during the crisis without situating the event in the social geography and political economy of Chicago in the 1990s.[15] The account here focuses on the social and political production of deprivation and suffering, but offers a broad perspective on individual, community, state, and symbolic levels of the city in order to illustrate the ways in which diverse actors and institutions are collectively implicated in making a major urban event that they experience individually. Drawing upon extensive fieldwork and in-depth interviews with Chicago residents, city officials and employees, social service workers, journalists, and research scientists, the book offers a vantage point on different positions and divergent experiences that rarely come together in social life.

Occasionally the accounts of social worker and scientist, state agent and single room occupancy resident, journalist and public official will appear incompatible or even contradictory. But together they will represent the range of positions and the diversity of viewpoints that constitute the heterogeneity of the modern city and account for the variations in the ways that the heat wave was managed and interpreted.[16] The counterposition of divergent views and different stories will help to illustrate the relationships between action in one sphere of the city—the journalistic field, for example—and activity in others, such as the emergency response agencies of the local government or the informal support networks in neighborhoods.[17] City dwellers and their institutions live and die in relation with each other—even when the relationship is based on exclusion. The heat wave puts into focus the ways that connections made or missed, visible or unrecognized, can determine the fate of the city and its residents.

The location of the heat wave makes the event an especially rich empirical resource for assessing the methodological and theoretical tools of urban sociology, and particularly the legacy established by the

Chicago school of urban research. For Chicago, with its famously divided segments, its infamous segregation, and its stark inequality, is not only the quintessential American city of extremes. It is also the city in and through which scholars founded and developed the American approach to urban studies, creating an agenda for investigation in the urban environment that shaped much of twentieth-century urban social science. Although in recent decades scholars associated with the new urban sociology have levied compelling criticisms of the Chicago school's "urban ideology"—most notably its failure to call attention to the political and economic production of inequality and domination in the city—the Chicago techniques for exploring the social fabric of the city offer rich possibilities for discovery.

The marks of both the first and second waves of the Chicago school are evident throughout this analysis of the heat wave: the case study; the emphasis on physical and social space; the focus on community and public life; the investigation of ethnoracial differentiation; and the assessment of the city as a total social system—all at the heart of the Chicago school problematic—are central to this project. Ironically, though, this analysis of the solitary deaths in the living laboratory of Chicago breaks from the school's traditional approach to the issue of *social isolation in the city,* one of the key concerns of the American sociology. For while the early Chicago school urbanists emphasized the isolation of different regions in the metropolis, here I treat the city as a complex social system of integrated institutions that touch *and* interpenetrate in a variety of ways. The distinctiveness of urban life lies in the spatial forms and the networks of actors and institutions that collectively organize a specific set of pressures, such as concentrated crime, crowding, and pollution, and possibilities, such as relationships with similarly disposed people and opportunities for political action. There has never been much evidence that urban regions are isolated as separate social worlds in the ways that the early Chicago sociologists described, and in retrospect, it appears that their method of focusing attention on one community or neighborhood oriented urban theory toward problems of segmentation rather than sources of contact and connection. But the heat wave helped to show that under contemporary conditions certain urban residents suffer from forms of *literal isolation,* the consequences of which can be dire. Assessing the social processes and spatial patterns that foster such isolation requires exchanging the Chicago school's biotic vocabulary for describing urban social processes with concepts and categories that recognize the significance of socially engineered inequality and difference. Moreover,

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it demands a method of investigation capable of comprehending the city as a complex system, where nature, culture, and politics conspire to determine the fate of its inhabitants.

The second major concern of this book is to analyze the symbolic construction of the heat wave as a public event and experience. My account pays particular attention to the processes through which political officials, journalists, and research scientists established the dominant analyses of the heat wave as well as the basic categories that organized public discourse about the trauma. Journalistic, scientific, and political institutions benefit from their symbolic power to create and to impose as universal and universally applicable a common set of standards and categories, such as *natural disaster* or *heat-related death,* that become the legitimate frames (or organizing concepts) for making sense of an unexpected situation.[18] For although everyone in Chicago experienced the severe climate, news reporters, politicians, and scientists were primarily responsible for explaining and interpreting it for different audiences. The heat wave was a cultural event as well as a public health crisis, yet for much of the nation it never registered as a major happening, and its legacy is difficult to trace. Examining the ways in which features of the catastrophe were brought to light or concealed helps to make visible the systems of symbolic production that structured the public understandings of the disaster. This part of the study helps to answer the question of why, despite the magnitude of the catastrophe and the spectacular journalistic coverage it received, the social life of the heat wave and its victims have been so easy to disregard or forget.

THE TYPICAL AND THE EXTREME

Although this book focuses primarily on the 1995 heat wave, the account offered here is not a conventional social history of the disaster. Instead, the analysis is motivated by two theoretical principles that hold that the case of the Chicago disaster can be used to open a broader inquiry into the life of the city. The first principle, which derives from the work of Marcel Mauss and Emile Durkheim, is that extreme events such as the Chicago catastrophe are marked by "an excessiveness which allows us better to perceive the facts than in those places where, although no less essential, they still remain small-scale and involuted."[19] The second principle is that institutions have a tendency to reveal themselves when they are stressed and in crisis.[20] There is no question that the weather that catalyzed the disaster was anomalous, but this book will show that many elements of city life that the disaster ex-

pressed are typical features of the local urban environment. Among the most important of these are a series of emerging conditions that have introduced new forms of vulnerability in U.S. cities, but that have been largely overlooked in the burgeoning literature on urban inequality.[21] The conditions that proved most consequential in the heat wave include the literal social isolation of poor senior citizens, particularly in the city's most violent areas; the degradation of and rising conflict in urban hotel residences, which constitute a large but often ignored sector of the low-income housing market; the changes in social service delivery and the threats to public health and welfare stemming from privatization and other radical shifts in local government administration; and the new social ecological conditions of neighborhoods abandoned by businesses as well as local governments and depopulated by residents. The conditions that the heat wave revealed did not disappear when the temperatures moderated, and their invisibility makes them all the more dangerous in the daily life of the city.

Take, for example, dying alone. The number of people whose lives ended in isolation during the one-week heat wave was unusually high, but the circumstances in which they were found are not uncommon in Chicago and other large U.S. cities. In a typical month the Cook County Public Administrators Office investigates roughly one hundred cases in which someone dies and no family members come forward to manage the estate or bury the body. These figures are not surprising when we consider the rapid increase in the number of Chicago residents, and of Americans in general, who live alone, especially in their old age. There is little public discussion of these trends, yet in recent years several cities have reported an increase in the number of their residents who die alone, often going undiscovered for days or weeks. In one major U.S. city, *The New York Times* reports, unclaimed bodies "are piling up faster than the city can handle them"; boxes containing the personal papers of the deceased are "piled floor to ceiling" in the county office.[22] "We had never been so busy before," one Cook County investigator explained, "but nothing about the heat wave was really unusual except the amounts" (see fig. 12).

For much of Chicago, however, the scale of isolation that the heat wave made visible defied the conventional narratives of community strength and solidarity through which this "city of neighborhoods" understands itself.[23] Few people outside of the Public Administrators Office were aware that so many Chicagoans were living and dying alone; and had it not been for the work of Chief Medical Examiner Edmund Donoghue (fig. 13), the city might never have been forced

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Figure 12. An exhausted worker takes a break after transporting bodies at the Cook County Morgue. Source: *Chicago Sun-Times;* photographer: Rich Hein. Reprinted with special permission from the Chicago Sun-Times, Inc. © 2002.

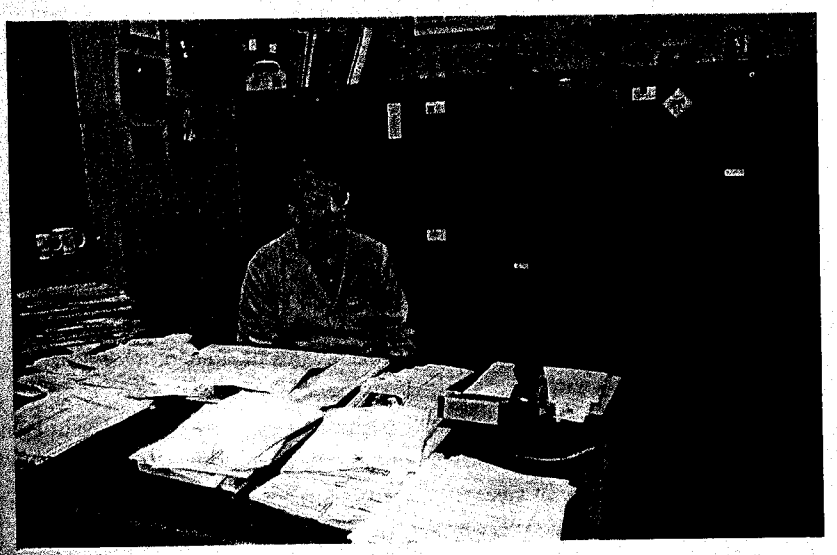

Figure 13. Chief Medical Examiner Edmund Donoghue. Source: *Chicago Sun-Times;* photographer: Andre Chung. Reprinted with special permission from the Chicago Sun-Times, Inc. © 2002.

to acknowledge the devastation in its midst. For it was Donoghue's early reports that the outbreak of death was attributable to the heat that turned the public health crisis into a major public event.

Donoghue, a physician who grew up in a politically active Chicago family and began working at the Medical Examiners Office in 1977, had followed recent heat epidemics closely enough to know that reports about their severity often sparked political controversies. Heat waves are slow, silent, and invisible killers whose direct impact on health is difficult to determine. Extreme heat breaks down the body's resistance but leaves much of the environment around it untouched. The evidence that a person has suffered a "heat-related death" lies in the setting in which the death took place as well as within the body, and investigators do not always know to, let alone *how* to, examine a possible heat wave victim.

Donoghue's knowledge of previous heat disasters made him aware of two procedures that would be essential for properly diagnosing heat-related mortality. First was the importance of establishing clear criteria for determining a heat-related death and instructing investigators and medical examiners to look for these benchmarks. Setting the criteria would not be an easy process, in part because in 1995 neither the federal government nor the National Association of Medical Examiners had developed a uniform definition for a heat-related death, resulting in inconsistent diagnoses in cities across the United States. Drawing on the most current scientific standards, though, Donoghue established three criteria, and classified a death as being heat-related if it met any one of them: "(a) a measured body temperature of 105°F at the time of the death or immediately after the death, (b) substantial environmental or circumstantial evidence of heat as a contributor to death (e.g., decedent found in a room without air conditioning, all windows closed, and a high ambient temperature), or (c) a decedent found in a decomposed condition without evidence of other cause of death who was last seen alive during the heat wave period."[24]

Second, Donoghue recognized the necessity of documenting information about the heat wave victims as soon as possible, and of being prepared to mobilize the evidence in support of the autopsies. He knew from experience that someone would challenge the death attributions; the case records, he believed, would support his scientific work. What Donoghue had not expected was that the challenge to the credibility of his medical examinations would come from the most powerful political leader in Chicago's recent history, Mayor Richard M. Daley. At a news conference held on Tuesday, 18 July, Daley flatly denied the validity

of Donoghue's death reports. His skepticism about the relationship Donoghue established between the weather and the surge in mortality resonated with other Chicago leaders, and journalists were quick to turn the mayor's remarks into the source of a controversy over whether the deaths were, to use the phrase that recurred at the time, "really real"—were they simply coincidental, or were they actually related to the heat? The day after the news conference *The Chicago Tribune* reported that the heat wave death toll had reached 199. But the paper also ran an article on coroners' disputes over heat wave death attributions as well as a column by the legendary Mike Royko headlined "Killer Heat Wave or Media Event?"

In the summer of 1995, Chicago's leaders and powerful boosters had ample incentive to question or deny reports that the city had become a cauldron of death and decay. After some thirty years of economic and social decline triggered by the flight of its manufacturing industries and the degradation of its neighborhoods and streets, by the 1990s Chicago had embarked on a political, socioeconomic, and symbolic recovery that promised to transform the metropolis.[25] Like most other major U.S. cities at the time, many residents and neighborhoods were enjoying the benefits of a durable and robust period of economic expansion, and even longtime critics had taken up the rhetoric of urban revitalization. Mayor Daley was winning praise from the local and national media for his campaign to reinvent the city government; new industries, including tourism, were replenishing the local employment base; suburbanites were moving back to the city after decades of retreat; and, to cap it all, the city was investing in a massive effort to beautify its streets and gloss its image in preparation for the Democratic National Convention of 1996. Well aware that its reputation had been tarnished by the violent 1968 convention, local leaders hoped that the 1996 event would be the showcase through which Chicago regained its reputation and lived up to its motto as "The City That Works."

The heat wave of 1995, though, threatened to cast a new stigma on Chicago's image and to undermine the city's resurgence at the very moment it was poised to ascend. The hundreds of deaths represented a massive social catastrophe, but in addition the ugly spectacle of death in the city was a potential public relations disaster, signaling to the world that Chicago could not shed the extreme poverty and insecurity with which its name had become associated. At home, Mayor Daley could not have helped but worry about the impact of the disaster on his political future. In a famous election just sixteen years before, Chicago

mayor Michael Bilandic had lost his seat to Jane Byrne in part because of his inability to clear the city streets during a catastrophic but far less deadly blizzard. The consequences of failing to protect the city from an attack of the elements could be severe, and although the Medical Examiners Office was part of the county government and not the city, Donoghue faced great pressure to tone down his reports.

The Chief Medical Examiner, however, refused to bow to external pressure and change his death reports, effectively preventing city leaders and opinion makers from dismissing the severity of the disaster without a public battle. "Another more politically sensitive guy might not have told the full story," explained Lawrence Harris, a former president of the National Association of Medical Examiners. "He [Donoghue] has got to be admired for telling it like it is."[26]

The criteria for determining heat-related deaths require that police officers or medical workers who discover a dead body record information such as the room temperature, environmental conditions, and the state of the corpse, and that medical examiners use this information when conducting their autopsies. Most deaths, however, do not require extensive police reports or medical autopsies. During heat waves many of these casualties go uninvestigated because private funerary agencies take care of the bodies independently. Many other cases, Donoghue knew, would fall outside the city's initial counts because Chicago residents who died in suburban hospitals outside Cook County would not be included in the citywide mortality figures until their death certificates were filed by a state office in Springfield, the state capital. For these reasons, deaths that might be heat related are often left unclassified, so public health scholars argue that heat-related death measures generally understate the impact of extreme weather.[27] Donoghue believed that the scientific evidence would support his findings, and in the face of widespread skepticism he boldly announced, "We would be delighted to have the figures checked. But if anything, we're underestimating the amount of death."[28] By the time the county had finished counting the bodies, the official heat-related death toll was 465 for the week of 14 to 20 July and 521 for the month.

Within days Donoghue's death attributions would receive support from another leading Chicago public health worker, Steven Whitman. Whitman, a former researcher at Northwestern University who had left academia to create and direct an epidemiology program for Chicago's Public Health Department, decided to compare the figures coming in from the Medical Examiners Office with the death rates from earlier Chicago heat waves. He recalled, "I was stunned to discover that no

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one knew anything about the history of heat-related deaths. I found newspaper articles that listed a few deaths here and there during hot summers, but few major reports about heat-related mortality." Whitman and his staff initiated a study of the major urban heat epidemics in U.S. history. They found the meteorological reports for extremely hot periods in major cities, then tracked down the relevant mortality rates. "It was amazing," Whitman explained. "We found events in which there were hundreds of deaths above the normal rates, but there was no public health literature to explain them."

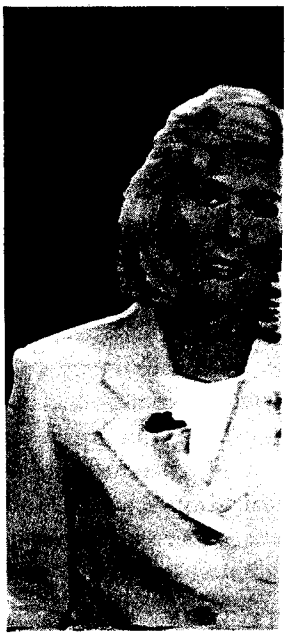
After carefully examining the records of previous heat waves, Whitman and his colleagues realized that the most accurate way to count heat wave deaths was to use the concept of "excess deaths."[29] Unlike heat-related death measures, excess death figures do not require special examinations of every case of mortality. Instead, epidemiologists can generate an excess death number by measuring the difference between the reported death rates for a given time period and the typical death rates for a comparable time. For their analysis of major U.S. heat waves, the Chicago epidemiologists compared the average mortality rates for cities in comparable periods before the heat epidemics with those during the extreme events. Their measures did not specify causes of death, so the researchers had to confirm that no other unusual event—such as a massacre or another epidemic—was responsible for inflating the mortality rates. But ultimately they were able to eliminate other potential causes of death from serious consideration, and they arrived at excess death figures for major heat waves in Chicago, Los Angeles, and New York that were more reliable than any statistics previously produced.[30]

The excess death study provided compelling evidence that Donoghue had been accurate on two counts. Not only were the Chief Medical Examiner's heat-related death attributions reliable, so too was his public statement that the early numbers had understated the severity of the disaster. According to Chicago's own excess death figures, 739 city residents above the norm had died during the week of 14 to 20 July—over 200 more than the county Medical Examiners Office had initially claimed. Equally important was the information that the epidemiologists obtained from Milwaukee, a city roughly ninety miles north that, though considerably smaller than Chicago, shares several social and demographic features with it. Using the excess death measure, Milwaukee had suffered a proportionally comparable catastrophe; yet the smaller number of total deaths and the media focus on Chicago kept reports from Wisconsin in the shadows.[31]

Finally, federal officials stepped in to support Donoghue's death attributions. Cynthia Whitney, an epidemiologist from the U.S. Centers for Disease Control and Prevention, told the media that "the medical examiner has given very, very good information. . . . Doctor Donoghue's criteria are very good."[32] City leaders who were skeptical of the death attributions found it difficult to challenge the wealth of scientific evidence and the legitimacy of the institutions that supported Donoghue's figures. "We're not going to talk numbers," one high-ranking official in the Health Department stated, signaling that the city's leadership would stop challenging the mortality figures and that one part of the political controversy had ended.[33] But the debate over the true impact of the heat wave continued.

After it became untenable to contest the validity of the coroner's mortality figures, city officials posed another question about the heat wave deaths: wasn't it likely that the heat wave simply affected a group of Chicagoans who were already on the verge of death, and whose demise was not so much caused as it was hastened by the heat? Everyone, of course, will die eventually, so it might seem disingenuous to ask whether the heat proved most consequential for the people who were, as some speculated, "about to die anyway." Unnecessary loss of life is significant, even if the loss is better measured in months than years. But the epidemiological question was at least somewhat more nuanced. If after the heat wave, for example, there was a decrease in the mortality rate substantial enough to counterbalance the 739 excess deaths during the crisis, some health scholars would consider the epidemic to be a case of "death displacement," because there was no net increase in the total mortality level.

The medical examiner's data show that disproportionate numbers of the heat wave victims were, in fact, members of the city's most vulnerable groups: the elderly, African-Americans, and the poor. But there is little reason to believe that the people who perished in the heat wave were already about to die. Two years after the catastrophe, the Illinois Department of Health analyzed the mortality patterns following the heat wave and found that, contrary to some officials' conjectures, there was no compelling evidence that the mortality levels during the crisis represented a displacement of deaths that would have occurred soon thereafter even without the extreme weather.[34] The heat wave, in other words, did not kill people whose deaths were imminent, but hastened the demise of vulnerable residents who were likely to have survived if the crisis had not occurred. Nonetheless, the skepticism voiced by Chicago officials and journalists made a major impact on the public inter-



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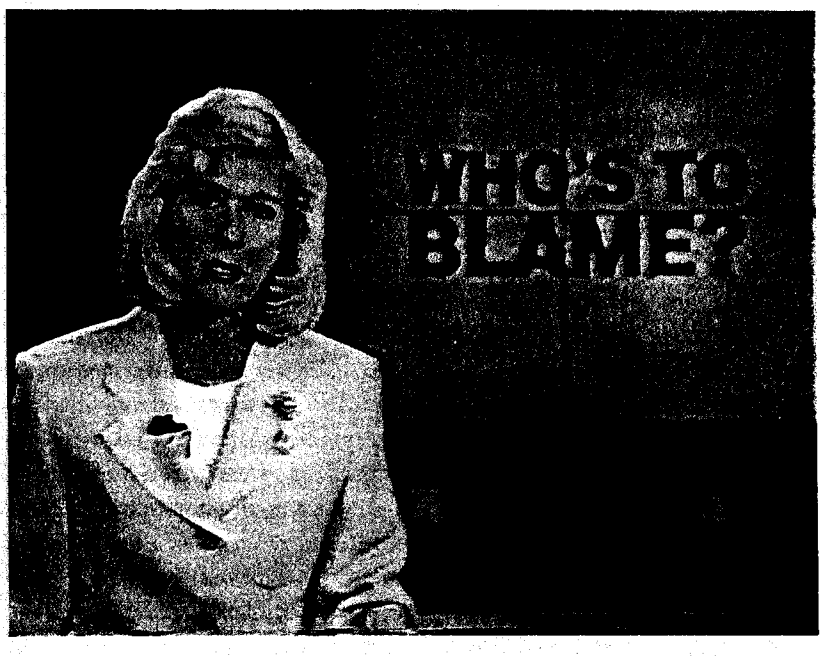

Figure 14. A Chicago television news anchor asks, "Who's to Blame?" Source: WBBM-TV (CBS affiliate).

pretations of the catastrophe; in the absence of more public verification of the heat wave mortality rates, the debate over whether the heat wave deaths were really real has continued to this day.

Once it became untenable for Chicago political officials to deny the scientific reports about the heat wave death rates, the city's most vocal residents and organizations embarked on another, equally distracting inquiry: who was to blame for the disaster (see fig. 14). There was no shortage of suspects. Some local activists and community leaders argued that responsibility lay in the hands of the mayor and his cabinet members. According to their argument, the leaders of various city agencies collectively neglected to recognize the danger posed by the social and meteorological climates and failed to organize an effective public response. One group of opposition African-American politicians on the city's South Side, for example, called for the resignation of several top city officials after the disaster and demanded a formal investigation of the event. For their part, city officials denied accountability and claimed that responsibility actually resided in groups and institutions outside their control. Commonwealth Edison, the primary utilities provider, became the target of the mayor and the city council

and was subjected to a public hearing. Official reports and public commissions criticized journalistic organizations that did not issue adequate warnings. Some, such as the daily newspaper the *Chicago Sun-Times,* countered by criticizing the city government for ignoring its own emergency plans. Top city officials faulted the families of victims for failing to attend to their kin. And the commissioner of the Department of Human Services simply blamed the victims, publicly declaring that "people . . . died because they neglected themselves."

But ultimately it is pointless to organize an inquiry into the heat wave as a search for a guilty party, as only the crudest forms of analysis could reduce such a complex event to a single actor, causal agent, or social force. There is no simple explanation for why so many Chicagoans died in the trauma, and there is certainly no individual or group responsible for the crisis. What makes the heat wave such a meaningful event is that it represents an exemplary case of what Marcel Mauss called a *total social fact,* one that integrates and activates a broad set of social institutions and generates a series of social processes that expose the inner workings of the city.[35] For when hundreds of people die slowly, alone and at home, unprotected by friends and family and unassisted by the state, it is a sign of social breakdown in which communities, neighborhoods, networks, governmental agencies, and the media charged with signaling warnings are all implicated. Showing how is the principal challenge of this book.

AN OVERVIEW OF THE BOOK

The inquiry presented here proceeds in layers, beginning with an account of individuals dying alone and extending to an examination of how communities and political agencies contributed to the vulnerability or security of Chicago residents. Chapter 1, "Dying Alone," explores the emergence of literal social isolation, the lack of contact with friends, family, and formal support networks that left so many Chicagoans uncared for and unprotected in the crisis. Two questions drive this chapter. First, what are the social conditions that explain why so many Chicagoans died *alone* during the heat wave? And second, to extend the first question, what conditions explain why, in the wake of this tragedy, so many Chicagoans continue to live alone, with limited social ties or contacts?

My answers to these questions are primarily based on sixteen months of fieldwork I conducted in Chicago. I spent much of that time alongside seniors who live alone, are poor, and report having few social ties. There is, unfortunately, little contemporary research on either the ex-

tent of isolation among city residents, particularly among the old and poor, or on the nature of this condition. Finding these seniors, let alone getting to know them, was not an easy task. Among the many paths I explored in search of the isolated elderly, the most fruitful went through social service agencies that worked with homebound seniors, city agencies that identify and assist the vulnerable elderly, single room occupancy dwellings that housed several older men, and one social organization whose mission is to provide companionship and support for older people who are on their own. Over the course of my fieldwork I interviewed or became acquainted with more than forty seniors, and the experiences I shared with them are central to my understanding of the varied nature of isolation and reclusion among the aged. Like most ethnographers, I developed particularly close relationships with a few of my informants, some of whose stories I tell in greater detail because they represent central features of being old, alone, and poor in the city.

It is, by definition, impossible to collect firsthand information about the experience of dying alone in an acute event.[36] The circumstances of the heat wave deaths, many of which went undiscovered for days, suggest some of the qualities of isolation in the city. Journalistic reporting immediately after the victims were discovered provides additional information about the decedents, some of whom had neighbors or relatives who spoke to the media during the crisis. But most of the accounts of individuals who died during the heat wave that I present here were garnered from research I conducted with seldom used sources, such as the Public Administrators Office files of personal belongings from people who died alone and were unclaimed by next of kin; a database compiled by the Medical Examiners Office; and police reports describing the conditions in which the heat wave victims were discovered. Finally, I conducted my own investigations into the life histories of several of the heat wave victims. I visited the places they lived and died, and spoke with neighbors, landlords, building managers, and, where possible, their friends and relatives.[37]

In chapter 2, "Race, Place, and Vulnerability," I consider whether there were place-specific conditions that heightened or reduced the risks of heat-related mortality for Chicago residents. Because several epidemiological studies have shown that social contact is a key factor in determining heat wave vulnerability, I examine the question of which community area social conditions facilitate strong and effective support networks and which conditions render frail residents even more susceptible to deprivation and isolation. Examining North Lawndale and

Little Village, two neighboring communities on the West Side of the city that had similar risk factors but radically different heat wave mortality rates, I consider how their specific social and ecological conditions influence the health and welfare of local residents.[38]

The research for this chapter is rooted in six months of near-daily observations made in the two neighborhoods between June and December of 1998, as well as in more than forty formal and informal interviews with local residents, merchants, political officials, religious leaders, community organizers, police officers, and neighborhood groups. The spatial contiguity between the two community areas, one almost entirely Latino, the other almost entirely African American, made it easy to move from one to the other. I split many days between the two areas, spending time among residents whose physical separation by a single street belied their experience of the border as a dividing point between what many referred to as "two totally different worlds." Religious institutions and community organizations were my primary sources of entry into the parts of North Lawndale and the Little Village that I got to know, with one of each becoming the base for my work in the neighborhoods. In North Lawndale two block clubs also took me in as an occasional guest, and I met several local residents through these groups.

The neighborhood comparison in chapter 2 is also the basis for my engagement with a major public debate concerning the nature of the heat wave mortality: why, despite similarly heightened levels of vulnerability, did Chicago's African-American community experience the highest proportional death rates of all ethnoracial groups, while Chicago's Latinos experienced the lowest? The comparative case study of North Lawndale and Little Village helps to show how variations in the social ecology of Chicago's neighborhoods affected the viability of collective life and neighborhood social support, and in turn determined the capacity of communities to buffer the dangers imposed by the heat.

The questions that motivated chapters 3, 4, and 5 grew out of my reviews of the political, scientific, and journalistic reports on the disaster. The commissions, hearings, and official studies produced by different political agencies suggest that several layers of government were involved in disaster management, playing roles in both the public efforts to assist city residents during the heat wave and in establishing the levels of vulnerability that made the event so deadly. In chapter 3, "The State of Disaster," I depart from the social scientific convention of limiting the study of government action during a disaster to the question of how its agencies *react* to the crisis. In addition to looking at

the way that different city agencies responded to the heat and health emergencies, I ask whether and how governmental programs and policies contributed to the social conditions that placed so many Chicagoans at risk of breaking down in the heat. More specifically, I draw on fieldwork conducted alongside city employees of the Police Department and the Department on Aging, as well as interviews with members of the Fire Department and its paramedics division, to assess how the structure and spirit of the newly "reinvented" local government affects the capacity of various local state agencies to provide services to poor, old, and precarious city residents. The question at issue is not whether the new forms of urban governance are more or less effective at providing support to city residents than previous systems, but whether there is a *good fit* between the human capabilities and social resources held by the vulnerable—particularly the poor elderly—and the set of emergent programs, principles, and social service strategies in contemporary city governments.

Chapter 4, "Governing by Public Relations," considers the city's public relations campaign to manage the crisis as a fundamental part of the emergency political response to the disaster. Drawing upon Stanley Cohen's typology of the methods governmental regimes use to deny their implication in cases of violence, I show how city officials deployed rhetoric designed to defuse criticisms about their role in the crisis and shift the direction of public outrage toward other organizations.

In chapter 5, "The Spectacular City," I draw upon observations made in a local newsroom and more than twenty interviews with journalists, editors, and managers who contributed to the coverage of the heat wave for one of Chicago's major news companies, to examine the symbolic production of the disaster in the major media. This investigation also breaks with the conventions of researching disasters and other social problems. Although it begins with a comprehensive content analysis of the journalistic coverage of the event, the chapter does not simply show which dimensions of the disaster journalists explored or explained and then speculate on the reasons for these reportorial patterns. Instead, it analyzes the cultural production of news and information about the heat wave and illustrates the organizational structure and vocational practices through which media organizations transformed the public health crisis into a public news event. As gatekeepers of the so-called public sphere, the media does the crucial cultural work of reframing, and not simply reporting, major issues for their audiences. Social scientists have a long history of studying newsrooms, but in recent decades they have produced few major accounts of the so-

cial, technological, and organizational conditions that have changed the work of news gathering in the age of digital production. Looking closely at the story behind the story of the heat wave, then, will also afford us a perspective on the conditions of journalistic production in a major city news organization that is otherwise difficult to obtain.

The book concludes with an overview of recent Chicago heat waves and an explanation of why even well-executed heat emergency policies are insufficient to remove the risk of future catastrophes. The results of the social autopsy suggest that extreme exogenous forces such as the heat will prove deadly again so long as extreme forms of vulnerability, isolation, and deprivation remain typical features of the urban environment. The epilogue, "Together in the End," provides a cautionary tale about the consequences of our collective denial.