the United States. Everyone interested in either of those issues simply has to read it.

Review:

## Heat Wave: A Social Autopsy of Disaster in Chicago

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In the MIDDLE OF JULY OF 1995, temperatures in Chicago rose to record heights as a mass of hot, humid air settled over the city. On Thursday the 16<sup>th</sup>, the high temperature was one hundred and six degrees Fahrenheit, or just over forty-one degrees centigrade. The humidity made it feel even hotter, more like one hundred and twenty six degrees (fifty-two degrees centigrade). Chicago prides itself on being 'the city that works,' but during the week of the thirteenth to the twentieth, the city's infrastructure, its administration and its people were tested to breaking point. Like the city's buildings and roads, Chicago's

<sup>&</sup>lt;sup>1</sup> Heat Wave: A Social Autopsy of Disaster in Chicago by Eric Klinenberg (Chicago: University of Chicago Press, 2002).

government, police force and hospitals buckled in the heat as they tried to deal with the crisis. In the end, epidemiologists found that there had been seven hundred and thirty-nine excess deaths that week. 'According to emergency workers, the task [of dealing with these deaths] was equivalent to having one fatal jetliner crash per day for three consecutive days' (p.8). Eric Klinenberg describes and analyses the effects of the heat wave in this ambitious book. His goal is to produce a 'social autopsy' of the disaster by looking closely at the 'social organs of the city' to 'identify the conditions that contributed to the deaths of so many Chicago residents that July' (p.11).

Klinenberg contrasts his approach with three alternative ways of understanding what happened. From a purely meteorological point of view, the heat wave was simply a natural disaster. These were record temperatures, after all, and society can often do little in the face of events like this. Klinenberg is not satisfied with this sort of explanation because it cannot account for why so many people died, or why particular sorts of people died rather than others. At the opposite end of the scale, simply focusing on individual cases – producing a 'catalogue of urban horrors' (p.11), as media coverage of the heat wave sometimes did – is also unsatisfying.

A third option does much better. During and after the disaster, epidemiologists and public health experts analysed data from police and medical reports about the dead, and surveyed the neighborhoods where the deaths had occurred. This work established what sort of people died and in what circumstances. Many of the victims of the heat wave died alone, often in 'Single Room Occupancy' (SRO) dwellings such as transient hotels or one-room apartments with shared bathrooms. The elderly were more at risk than the young. Almost three quarters of the victims were over sixty-five. Age-adjusted death rates showed African-Americans were one and a half times more likely to die than Whites, and the ratio was considerably higher (almost two to one) for very old victims. Latinos, on the other hand, accounted for only two per cent of all deaths, despite making up between a fifth and a quarter of Chicago's population. African-Americans were almost thirty times more likely to die than Latinos. Strikingly, the age-adjusted death rates for men and women were also very different: men were more than twice as likely than women to die from the heat.

These epidemiological patterns suggest explanations for themselves. The vulnerability of the elderly to the heat is understandable. The disproportionate risk borne by African-Americans is sadly unsurprising. But it also raises puzzles: Why was the risk of death so much lower among Latinos? Why did more men die than women? Klinenberg respects the epidemiological work and relies on it to establish his case. Because of its emphasis on the relative risks experienced by different groups, it is a substantial step beyond explanations that see natural disaster as something that confronts everyone in the same way. But he wants to go beyond this, to place 'individual-level factors that affect death rates within a broader context of neighborhoods, social-service systems and government programs' in order to provide a 'multilayered analysis' of what happened. This is what he means by a 'social autopsy.'

Klinenberg adds three layers to the epidemiological picture. First, like the classic Chicago-school urbanists, he insists on the importance of the city's social geography. People didn't just fall into categories of greater or lesser risk, they also lived and died in specific neighbourhoods whose characteristics affected their chances of survival. The long-term decline in Chicago's manufacturing economy left once vibrant areas devastated, crime-ridden and violent. A neighborhood's social ecology – its structure and layout, the texture of everyday life on its streets - made a big difference to how people fared during the heat wave. Second, neighborhoods are not all served equally well by the city government. When social policy contains rather than rehabilitates problem areas, or when service providers are ill-equipped or unwilling to work in dangerous places, everyday life becomes harder for locals and managing a disaster is much more difficult. Finally, the city's public understandings of its problems are partly the result of media coverage. Although they tend to kill far more people than earthquakes or tornadoes in the US, heat waves do not look like serious natural disasters. This made it harder for the public to grasp the severity of what was happening. This problem is exacerbated when the most disadvantaged and vulnerable people are segregated in specific neighborhoods, where they are easier to ignore.

Klinenberg makes his case for the importance of neighborhoods by comparing two adjacent parts of the city, North Lawndale and South Lawndale (also known as Little Village). The two communities are comparable in many ways: they have comparable elderly populations, roughly similar proportions of which live alone or in poverty. North Lawndale is ninety-six per cent black. Little Village is eighty-five per cent Latino. In the heat wave, nineteen people died in North Lawndale (a rate of forty per one hundred thousand). In Little Village, only three people died (a rate of four per one hundred thousand). Why was the death rate in North Lawndale so much higher?

A commonly proposed explanation was that Latinos had stronger family networks than African-Americans, especially networks spanning generations. Klinenberg dismisses this idea, arguing that, stereotypes notwithstanding, there is nothing about Latinos per se that disposes them to have dense family networks. Survey data suggests that US-born Mexican-American seniors are significantly more likely than the foreign-born to be out of contact with their children. A similar point applies in reverse to African-Americans, who as a group have also had strong family networks in other contexts. Family ties did not save people, Klinenberg argues, rather the kind of neighborhoods they lived in did. North Lawndale has a 'bombed-out' appearance, with empty lots, little street life, few shops or markets, and a great deal of violent crime. Many people, especially seniors, are afraid to leave their homes. Though there are many churches, they are not so well-rooted in the community and find it difficult to provide social services to the elderly. Little Village, by contrast, is bustling with commercial activity on busy streets. There are plenty of people out on the street, shopping or simply hanging out. There are few empty lots. Local churches offer a variety of social activities for seniors. Little Village's population grew by a third between 1970 and 1990, while North Lawndale's more than halved.

When the heat wave came to both places, these differences mattered a great deal. In Little Village, the people most at risk of dying were able to leave their homes and go and buy supplies or simply rest in airconditioned stores. It was not too dangerous to be outside at night. They knew people locally to call for help or check in with. In short:

Residents of the most impoverished, abandoned, and dangerous places in Chicago died alone because they lived in social environments that discouraged departure from the safe houses where they had burrowed, and created obstacles to social protection that are absent from more tranquil and prosperous areas. (p.127).

A strong piece of evidence in favour of this claim is the fact that people who had 'aged in place' – those leftover from when the neighborhood was Polish, say, and who were thus ethnically and linguistically isolated from their neighbors – did not die in as large numbers in Little Village as in North Lawndale. It was the nature of neighborhood life rather than sheer luck or the structure of ethnic networks that made the difference. This idea is further supported by the fact that three of the ten areas with the lowest heat wave death rates were also overwhelmingly African-American.

Klinenberg does not want to focus just on the day-to-day features of these neighbourhoods. He makes an effort to explain why, over the long term, North Lawndale became an 'abandoned community' (p.91) while Little Village thrived. He also devotes a chapter to the response of the city government to the crisis, arguing that the city managers did not understand the severity of the heat wave until it was too late and were unprepared to act once they did. Klinenberg describes a long-term 'lack of political will ... to provide basic resources' to the poor and elderly (p.142) combined with more recent moves toward a more 'entrepreneurial' provision of social services which made it more difficult for poor or elderly citizens to take advantage of what was on offer. Other changes on the supply side made things difficult, too, such as the delegation of 'soft' health and social support services to police and fire departments that were often ill-equipped or unwilling to provide them.

The final layer of this complex story is the role played by the media. Klinenberg gives a detailed account (based on content analysis and interviews with reporters) of television and newspaper coverage of the heat wave. He argues that the media tended to cover the story as though the heat affected everyone equally, and that it presented the victims as being 'just like us.' It proved difficult to present 'newsworthy' images of the crisis. There were some: on the worst days of the heat wave, the city morgue was so overwhelmed with bodies that it borrowed nine refrigerated truck-trailers from a meat-packing company. The image of bodies being loaded into the trailers in the morgue parking lot galvanised public opinion and put the mayor's office on the defensive. But for the most part, and especially in the aftermath of the disaster, Klinenberg argues that the real story, like the victims of the heat wave, was largely invisible. The story faded along with the heat.

With so many interacting layers, from individual to neighborhood to city-level effects, a wholly satisfying analysis is perhaps too much to ask for. Klinenberg borrows the language of the epidemiological studies in order to emphasise the novelty of his 'social autopsy,' but it would be impossible to generate the same kind of detailed data about neighbourhoods and the city's institutions as the Centers for Disease Control (CDC) collected about the heat wave's victims. The CDC carried out an intensive case-control study, which meant visiting the residences of four hundred and twenty pairs of victims and a closely matched control, i.e., someone who resembled the deceased and lived in similar conditions, but who had not died. They interviewed the control subject and then a friend, relative or neighbor of the deceased. They gathered information about their life and circumstances. To make his case about the importance of neighborhood effects, Klinenberg says that 'Like the CDC epidemiologists, my first challenge was to find a matching pairs of cases that experienced different outcomes during the disaster.' (p.86). Given the number of explanatory variables he has in mind and the time and resources available to him as an individual researcher, his single matched pair cannot bear the full weight of the analysis - at least, not to the degree that an epidemiologist might demand - and his data about the media and the city's response is detailed but by its nature needs much more interpretation. As a result. some parts of his case are more convincing than others, especially if the reader expects the epidemiological language to be more than a compelling metaphor for the comprehensive account that the author wants the book to be.

Klinenberg works hard to show how the city government was unprepared for the disaster and does not hesitate to assign blame. He chose to study the heat wave precisely because 'institutions have a tendency to reveal themselves when they are stressed and in crisis' (p.23). But if the city had responded a bit better there might have been no disaster at all, or at least a much smaller one. Indeed, the city suffered a similar (though not as severe) heat wave just a few weeks later, and the city performed much better. Agencies did their work in a coordinated and effective way, and very few heat-related deaths were recorded. Klinenberg suggests that this was a result of the political pressure on the city rather than evidence of any real change in the mode of governance.

But it does raise the question of the relative importance of the neighborhood effects he shows at work in North and South Lawndale. The robust neighborhood ecology gets the credit for saving lives, but the city government gets the blame for the deaths. This brings out the limits of an approach based on analysing disasters or other rare events. After all, Klinenberg's goal is not to provide a preparedness checklist for future heat waves. His underlying concerns are with the long-term evolution of Chicago's neighbourhoods and with big questions of urban social policy. The analysis of the heat wave throws these issues into sharp relief, but it also limits the kind of evidence that can be brought to bear on them, as well as the generality of the lessons we can draw.

Nevertheless, the book effectively marshals a very great deal of evidence from a wide variety of sources. The argument is clear throughout. Klinenberg attempts to see the disaster in all its complexity and to trace the connections between individual circumstance and evolving neighborhoods as they play out in a large and hard-to-govern city. His case is at least plausible and often compelling. Moreover, although experts in the fields Klinenberg draws on – epidemiology, public health, social policy, urban ethnography, political economy – will find a lot to argue with, the effort to draw these perspectives together and show how they interconnect is a virtue of the book rather than a failing. Its reach may exceed its grasp at times, but there are worse faults than that in social science.