

Ethnography, the Ecological Fallacy, and the 1995 Chicago Heat Wave

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*In Chicago in July 1995, the Cook County Medical Examiner classified 739 heat-related deaths after one week of record high heat and humidity. In the 2002 book *Heat Wave*, Eric Klinenberg provides an influential account of these deaths. Klinenberg specifically contrasts mortalities in two neighboring communities, black North Lawndale and Latino South Lawndale. He explains the mortality difference by focusing on how elderly black residents, including those in “literal isolation,” were impacted by neighborhood conditions. However, Klinenberg’s book provides no data on the individuals who died. The author of this Research Note reports more data obtained by traveling to these two communities and to the bordering white community of Archer Heights. The author compares his findings against data available on death certificates for all decedents. At the time of the heat wave, many of the people who died were not elderly and only two elderly victims in North Lawndale were living alone. In the bordering white community, most decedents were living alone during the heat wave and none had ever married. The author questions whether Klinenberg’s theory operates at the individual level in North Lawndale and assesses whether Robinson’s “ecological fallacy” pertains to Klinenberg’s study.*

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In his book *Heat Wave: A Social Autopsy of Disaster in Chicago*, Eric Klinenberg (2002) reports his study of the 1995 event that killed 739 people. His multifaceted study included fieldwork at the neighborhood level within the context of the Chicago city government’s actions (or failures to act in the face of the crisis) and of the reporting of the mass media: “This book . . . 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” (2002:18). Klinenberg tries to deepen the understanding of reasons that the poor, black neighborhood of

North Lawndale had a significantly higher death rate than the bordering Latino neighborhood of South Lawndale, where many more seniors lived alone. He explains the high death rate in North Lawndale by focusing on the elderly, who he argues were especially vulnerable to social isolation from friends, family, and other support networks due to neighborhood conditions, such as high crime rates, empty sidewalks, and low population density. In South Lawndale, the social ecology of the neighborhood drew elderly citizens from their apartments, thus protecting them from the “literal isolation that threatened seniors in North Lawndale” (2002:124).

Klinenberg’s study casts a whole new light on heat waves that practitioners in other fields missed. It shows the continued relevance of a long tradition of scholarship in urban sociology that focused on human ecology. It also challenges those working in public health and medicine to consider neighborhoods either as protective for individuals or as detrimental for their health outcomes in the face of crisis, including those created by heat waves. The soci-

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ological community and the mass media embraced *Heat Wave* as showing the value of modes of thinking derived from a sociological perspective, as opposed to those derived exclusively from public health, medicine, or common sense.

Given the importance of this research and the visibility of Klinenberg's "social autopsy" as a method for studying disaster, it is important to probe further the causes of individual deaths in particular Chicago neighborhoods. In a *Contemporary Sociology* (CS) symposium on *Heat Wave*, I was one of three critics who raised a wide variety of issues (Clarke 2004; Duneier 2004; McLeod 2004). Klinenberg's (2004) spirited response to my review of his work highlighted the importance of his theoretical contribution, the value of his multi-sited fieldwork, and the legitimate sources of disagreement between us. Summarizing his argument about neighborhood effects, Klinenberg (2004) wrote the following:

Here is the major claim that emerges out of my neighborhood comparison: 'There is little evidence that during the heat wave the most isolated and vulnerable residents of places like North Lawndale suffered because members of their community did not care about them. Yet there is good reason to believe that the 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. 524)

In my review essay (Duneier 2004), I note that *Heat Wave* presents no data on the specific *individuals* who passed away in either of the neighborhoods that Klinenberg studied, and so his account simply assumes that the decedents were elderly or that they had died alone. Klinenberg notes that, in North Lawndale, 24 percent of seniors lived alone (2002:87), and that a study by the Centers for Disease Control (CDC) found that living alone and not leaving home were particular risks for heat-wave death (Semenza et al. 1996) (Klinenberg, 2002:80). Yet, it is impossible to determine if these are the relevant factors in North Lawndale without knowing more about the people who lived there and how they died. We debate a lot of questions in the CS exchange, but that key issue remains unresolved. This research note focuses on that question.

It is a potential mistake of any community study to draw inferences about individuals using data about groups in this case rates for North Lawndale or for Chicago. Since Robinson's (1950) seminal article, sociologists have known about the "ecological fallacy," and a large body of recent methodological literature proposes methods capable of using aggregate data to estimate features of individual-level behavior (King, Rosen, and Tanner 2004).

I was interested in finding out whether Robinson's ecological fallacy pertains to Klinenberg's study of North Lawndale, and the goal of this note is to shed some light on that question. In my CS review (Duneier 2004), I suggest that some basic shoe leather would have been sufficient to illuminate whether deaths in North Lawndale conformed to what would have been expected from Klinenberg's theory. Sometimes detailed ethnographic evidence exists "out there" waiting for a social scientist to uncover it, and all someone needs to do is ask. I decided to take my own advice, and here is what I found.

GATHERING THE DATA

On the afternoon of June 3, 2004, Ovie Carter, a black photographer, and I, a white sociologist, walked around North Lawndale, making the first of two visits to gather and preserve historical information about the 1995 heat wave through interviews with residents. Using a list of names and addresses supplied by the Cook County Medical Examiner, we visited the homes of decedents. With the help of an expert in geographic information system (GIS) mapping, I had sorted these deaths by neighborhood. I was able to identify 17 deaths in North Lawndale and 2 deaths in South Lawndale, though I later learned that 1 death listed had not been classified as heat related.¹ This left 16 relevant deaths. I investigated these decedents, in addition to the 2 that were listed for the bordering community of South Lawndale and the 5 that were listed in the neighboring white community of Archer Heights. Two research assistants later did

¹ These data differ slightly from those provided by the Illinois Department of Public Health, which reported 19 deaths in North Lawndale and 3 deaths in South Lawndale.

additional interviewing on my behalf, and I followed up with additional telephone calls.

At the first house we went to in June 2004, I introduced myself to Walter Dampeer, a 50-year-old black man who was watering his front lawn.² I explained that I was a sociologist investigating a death that had occurred here during the heat wave of 1995, and he stopped me, saying, "I'll see if my wife is available. That was her brother you are talking about."

Mrs. Dampeer was welcoming and ushered us up to her apartment on the top floor of the brick building in which they resided. She offered us chairs in the bedroom off the kitchen where her late brother Ricky Coleman's belongings remained and then launched into a story of how he had passed away at the age of 48 when their parents, Jerry Foster and Ruth Coleman, were present just one room away. Ricky had been a heroin addict throughout his adult life. His room did not have an air conditioner, and his fan still sat in the corner of the room. The distance between the bedroom window and the brick building next door was less than two feet, allowing for only the most minimal cross ventilation.

Mrs. Dampeer recalled her parents' shock when her brother failed to emerge from his room to remove something he was cooking on the stove. She opened a chest full of his papers and photos that documented aspects of his life. When we left, she insisted that we each take one of his favorite record albums from the big collection that still remained in the closet. "He lived for those records," she told us.

Information was not always so easily obtained, such as when all the current residents of the house had moved in after the 1995 heat wave. Not only did these newer residents have no knowledge of the deceased, they often did not even know that a death had occurred in the house. "That's the first time I ever heard that," Rita Ashford told me as she sat on her front steps.

When we could not get information from residents of the home where the decedent had resided, we searched for a "well-informed informant" (Back 1953) on the block who did

know the circumstances of the death that we were investigating. Many of these encounters were highly emotional, such as when we met a 45-year-old black man fixing his car. He had personally carried two heat-wave decedents from his block downstairs before they were taken to the morgue. These were people he had known his entire life. He was also well informed about people who had died elsewhere in the neighborhood, and he put us in touch with people familiar with the circumstances of their lives and deaths. He appeared shocked that anyone was interested in knowing more about them, and he talked with us for more than an hour.

Fourteen of the 16 buildings where deaths occurred in July 1995 were still standing when we visited them in 2004, and we were also able to collect information about people who died in the other two buildings. Upon arrival, I knocked on the door. Often it seemed nobody was home; it usually took a few minutes for someone to answer. Only two people seemed afraid to open their doors to strangers, but everyone we called on spoke to me.

When someone appeared and opened the door I would say something like the following:

Good afternoon. My name is Mitch Duneier and I'm a sociologist conducting a study of the 1995 Chicago Heat Wave. I'm trying to learn how people died. I understand that a (wo)man by the name of ____ might have passed away in this building. Do you know this person?

I asked a number of general questions like these, which led to more detailed follow-ups: Was the person who died living alone? If he or she was living with others, what were their names? Did he or she have any health problems? Who was the last person to see the decedent? Could I see the room in which the person passed away? Did he or she have a fan in the room or house? An air conditioner? How frequently did the person go outside? What else can you tell me about the lifestyle of the person who passed away?

RESULTS

LIVING ARRANGEMENTS

OLDER THAN 65 AND LIVING ALONE. In visiting all of the 16 addresses in North Lawndale on the Medical Examiner's list of heat-wave victims, I found that 2 persons over 65 years of age had

² Permission to use the names of the interviewees has been obtained. Names that have been changed for anonymity are noted in the text.

been living alone. The daughter-in-law of Bernice Cowan, 72, a divorcée, told me her husband went by 2 to 3 times per week to take out his mother's trash, "but she got to a point where she didn't want anyone in her house." Leon Smith, 80, was a widower. A neighbor who sits on his stoop throughout the day told me that Smith's friend, a police officer named DeWallis Gordon, currently living in Florida, checked on him every day. In addition, he lived 13 minutes from the home of his daughter, Frances Woods. According to his neighbor, Smith was a regular at Lena's Lounge, an air-conditioned tavern just a few steps from his house and was not a social isolate or a shut-in.

UNDER 65, LIVING ALONE. Two people under 65 lived alone. Eddie Williams, a 59-year-old divorcé was living by himself in his own house, and James Franklin, a 37-year-old divorcé, was living alone in a rented apartment.

LIVING TOGETHER. The remaining 12 of the 16 people who died in July 1995 were living with their families or domestic partner. James Douglas, 67, and Grover Wilson, 76, two brothers who died a day apart, lived together (on the second floor of a brick building) with Douglas's wife, Katie. Ricky Coleman, 48, lived with his parents, Jerry Foster and Ruth Coleman, off the kitchen of their two-bedroom apartment in the same small room that he had occupied for most of his life. Walter Jackson, 39, lived with his male partner, Beemer, who still resides in the neighborhood and works as a can scavenger. Anna Moore, 78, lived with her 50-year-old son. Booker Washington, 71, lived with his wife, Lola. Elnora Coburn, 86, lived with her daughter, Linda, and her two grandchildren. Mary Mattellos, an 83-year-old widow, shared her house with a female friend. "The two women in the building lived together for so many years that they combined resources," said Dorothy Morris, who lived across the street. Ora Johnson, 92, was living with her husband, Obie Johnson. Willie Rose, 63, was living with his wife, Emma. Letitia Thomas, 35, was living with her parents, Bertha and Holey, a few doors down from other relatives. Robbie Lowery, 79, was living with her sister, Mary Gowans, and her sister-in-law, Lucille McClain, a nurse. "I cooked her dinner, combed her hair, and gave her a bath. She

was talking to me before she went to sleep on the couch," said Lucille. "And then she never woke up. It was her time to go."

Of the 16 people who died in North Lawndale, at least 12 (75 percent) were living with families and had domestic relationships.

YOUNGER PEOPLE. Many deaths occurred at the younger end of the age distribution. Six of the 16 people to die in North Lawndale (38 percent) were under age 65. They were Ricky Coleman, 48; James Franklin, 37; Clarence Jackson, 39; Letitia Thomas, 35; Eddie Williams, 59; and Willie Rose, 63.

A BUNKER MENTALITY? Of the 16 people who passed away during the heat wave, 14 were said by relatives or neighbors to have gone out of the house regularly. Elnora Coburn, 86, lived with her daughter and her two grandchildren, and she rarely left the house. Her neighbor Charlene Sharp told me, "She would go in the room and close up the door. She would lock herself in." It is not clear that Coburn was actually afraid to go outside, but nothing I learned would preclude that possibility either.

DYING ALONE: ENTER A BORDERING WHITE NEIGHBORHOOD

This is not to suggest that the risk factors embraced by Klinenberg to explain the North Lawndale deaths were not at all evident elsewhere. Since he also writes about South Lawndale, I investigated the two deaths in that Latino neighborhood. Felipe Sampila, 75, was a widower who was born in Mexico. A retired school aide, he lived by himself in a small brick home, a few neighborhoods away from his sister, Magdalena. Edward Tyle, a 66-year-old white attorney, was living with his wife, Elmira, in a brick house. Since I could not draw any conclusions on the basis of just two cases that were so different, I also checked out the bordering white middle-class neighborhood of Archer Heights. Klinenberg had noted that Chicago's white population had undergone significant transformations in previous generations: families and extended kinship networks were spatially separated as children or parents went to suburban areas, or out of the metropolitan area (2002:95). I thought it would be interesting to

see if this insight could help explain the deaths next door to those in North Lawndale.

Archer Heights, a relatively small community, experienced five deaths. The high mortality rate there (higher than North Lawndale) is by no means an anomaly. Bordering Archer Heights were two other high death-rate white communities—McKinley Park (which also had a higher death rate than North Lawndale) and Bridgeport (which had a death rate comparable to the high rates in the black communities of Kenwood and Englewood) (see Klinenberg 2002:85). While Klinenberg reports that Chicago's white population as a whole did better during the heat wave than did the black population, the failure of certain white neighborhoods to adapt to the heat is nevertheless notable. I visited Archer Heights with the hope of learning more about the deaths there. Not only is it a lower-middle-class community, it is also a neighborhood with low crime rates, upgraded public spaces, and major commercial thoroughfares. How did these people die?

In the years since then, the blocks where people died in Archer Heights have gone from being white to Latino, and few people in the community remembered anyone who had died in the summer of 1995. Nevertheless, I was able to learn something about all of the people who died there.

When I could not find anyone on her block to remember Angela Haber, a white woman who passed away during the heat wave at age 72, I wandered through an alley to the home behind hers and met Conrad and Helen Sikora. Conrad told me what he remembered about Angela:

She was a spinstress [*sic*]. Never married. She was a loner. In fact, when they came in there in that heat wave, they had to break into the house. They were inundated with a terrible smell. All the plumbing was backed up. The newspapers were piled this high [indicating up to his waist]. We knew she was living like this, but it was none of our business.

Conrad told me that Angela had a fan and an air conditioner, that she was not a drinker, had never married, and that she lived on the first floor. "She didn't let anyone into her house," he said. "She worked as a secretary for a downtown store and then retired from her job and isolated herself and that was it." Her closest relative, a sister, lived in Oak Lawn, a middle-class suburb outside Chicago.

Two of the other white Archer Heights deaths occurred in one home. Mary Grzyb, 75, and Emily Grib, 77, were sisters who died during the same week in the house that had once been owned by their parents.³ Neither had ever married. Emily was a retired factory worker, and Mary had been on disability since she lost her leg many years earlier. Both were discovered dead by a visiting nurse who regularly came by to bathe Mary.

"I didn't talk to them," said their next-door neighbor of 30 years. "A man would come to deliver food." Their niece in the suburbs explained, "They never came out of the house. My husband and I would visit and take them out, but we were busy with my mother who was sick and needed care. They were not rich people. They had a small air conditioner."

Next I went to the home of Chester Golema, a 69-year-old white male who was a retired railroad employee and had never married. "He was a single man," said Rosie, his neighbor. "His parents were dead. His sister Irene came by from West Lawn."

Clarence Helka, the last of the Archer Heights decedents, was a 72-year-old white male. A retired maintenance man at Con Edison, he lived alone. Like the others who died in this community, he had never married.

POSSIBLE ADDITIONAL HEAT-WAVE RISK FACTORS IN NORTH LAWDALE

Many of the deaths in North Lawndale involved other kinds of factors that were not discussed in *Heat Wave*.

At least 8 of the 16 decedents were described by their neighbors as alcoholics, heavy drinkers, and/or drug addicts. In my very first interview with the family of Ricky Coleman, as his sister went through his belongings, she spontaneously raised the drug and alcohol issue. The family told me that Ricky had struggled with heroin addiction and alcoholism for most of his life, and they gave me permission to use his name in discussing the issue in my report. I treated this as a sensitive question and usually waited for informants to bring it up on their own. When

³ Emily changed the spelling of her name to seem more American, according to her niece.

they did not, I always raised it at the end of the interview.

With the exception of Ricky Coleman, I have changed the names of all supposed alcoholics and drug addicts. Walter Taylor supposedly was a heroin addict, cocaine addict, and alcoholic; Clarence Jackson was described as a coke addict and heroin user; and Letitia Thomas was reported to have been a drug user. James Douglas, Grover Wilson, Leon Smith, Clarence Jackson, and Eddie Williams were all said to have been alcoholics or heavy drinkers. Of the remaining 8 heat-wave decedents, I learned that at least 4 were observed *not* to have had these problems. While I could not get reliable information about the other 4, I have no reason to believe that they were alcoholics or drug users.

Counting only the known cases, a minimum of 50 percent of the heat-wave decedents in North Lawndale were said to be alcoholics and/or users of illicit drugs. By contrast, according to the National Household Survey on Drug Abuse (NHSDA) 1998 U.S. data, approximately 8.2 percent of blacks and 18.2 percent of unemployed adults (age 18 and older) are known to use illicit drugs (Office of Applied Studies 2000). This research note uses national data here, because data for Chicago are not available.

Second, in terms of additional risk factors, this survey shows a community besieged by lack of work. Unemployment would be particularly significant in the case of the younger decedents who were not yet of retirement age. In North Lawndale this amounted to all of the younger deaths and to 8 of the total 16 people who died, or 50 percent. In 2000, the overall unemployment rate in North Lawndale hovered around 25 percent (Chicago Community Fact Book Consortium [1985] 2000; best data available closest to the period of the heat wave).

Third, living on the top floor of a building (the hottest part) was a major risk factor for heat-wave death in North Lawndale. I found that 15 of the 16 people (94 percent) who died in the heat wave were living on top floors. Although I do not know the number of people who lived on top floors in North Lawndale as a whole, it would be much lower than 94 percent of the population. Top-floor residence is a risk factor that the CDC found to be most important of all, twice as important as living alone (Semenza 1996). The highest floor is not only the hottest, but multiple stairs can be an impediment to

venturing outside, especially for those with limited mobility.

Fourth, and also consistent with findings of the CDC (Semenza 1996), the absence of a working air conditioner was a crucial risk factor. None of the heat-wave decedents in North Lawndale had air conditioners in the room where they died, and only one had an air conditioner in the apartment. By contrast, 50 percent of homes below the poverty line in the United States are reported to have air conditioners, and presumably an even greater proportion have either air conditioners or fans (Cox and Alm 1999).

It is, of course, important to proceed with caution when making inferences from the mortalities alone. Regarding these variables, it is beyond the scope of this research note to make causal inferences by comparing those who died to otherwise similar people who did not die in the heat wave. Until such a case control study is undertaken, these factors should be taken as nothing more than suggestive of the kinds of risks that might have been operating in the North Lawndale deaths.

VALIDITY AND DATA QUALITY

It was notable that almost a decade after the disaster, I was able to collect a great deal of information about all 16 people who passed away in North Lawndale. But what is the quality of that data?

Consenting to an interview entailed influencing how stories about friends or relatives would be made part of a sociologist's record. In real life, even the most straightforward "facts" like age or family status can be difficult to record in an accurate way. Who but the most unusual persons would want to have the record reflect that they did not check up on their relative every day, that they were not a good sibling or a good child? The data in this research note are based on observations of decedents' behaviors by neighbors who might have less evident motive to misrepresent what happened, but even here we must proceed with caution.

Months after I did my rounds in these neighborhoods, I obtained death certificates for each of the people who died there. These documents provide a comparison for most of the information I have presented including age, gender, employment status, marital status, and the names

of husbands and wives. The articulation between the interview data and death certificates suggests a consistent and perhaps even reliable approximation of the demographic characteristics of decedents.

Certain other data—particularly data about victims' possible abuse of alcohol and illegal drugs provided by informants some nine years after the heat wave—must be treated with considerable caution. Is it possible, for example, that informants' reports about victims' behaviors prior to the heat wave were affected by the victims' deaths? Could rumors about possible alcohol and drug use have become the default explanation for heat-related death among victims' neighbors after the fact? While I have treated such reports with more uncertainty than the demographic results, we need not give up all hope. There is reason to believe that the data presented here are not unreliable. First, drug and alcohol use turned out not to be a default explanation: Some of the informants volunteered that the decedent did *not* drink or use drugs, while others answered my questions about alcohol and drug use in the negative. Second, the information provided by my informants on the ages and names of spouses conformed with that provided on the death certificates and Medical Examiner records. In other words, my sources had proved to be reliable in reference to details more precise than whether someone was known to have a problem with drugs or alcohol. Third, the claim that a significant number of decedents were alcoholics is consistent with longstanding findings in the field of public health, where researchers have noted an association between alcoholism and heatstroke death: "This relationship is biologically plausible, since alcohol inhibits the secretion of anti-diuretic hormones and thus induces relative dehydration" (Kilbourne et al. 1982). Fourth, two of the four people whom I learned had been drug users had reference to the possibility of this condition on the death certificate.

DISCUSSION

These data raise questions about whether Klinenberg's theory actually applies to the lives of the 16 people who died in North Lawndale and whether it can explain the difference in mortality rates between North Lawndale and South Lawndale. While he focuses on how *eld-*

erly residents were rendered vulnerable by specific features of the North Lawndale neighborhood, my data suggest that many of the victims were not elderly. The social autopsy rendered invisible 38 percent of the North Lawndale deaths, those that occurred to people at the lower end of the age distribution. Furthermore, despite his emphasis on the phenomena of "literal isolation" (2002:124) and the "prevalence of seniors living alone" (2002:127) in the North Lawndale deaths, only two of the elderly victims in that neighborhood had been living alone.

To further grasp deaths like these, this fieldwork suggests that future studies might focus on *normal moments of alone time* within the rhythms of everyday domestic life. It was in such a normal moment that Ricky Coleman, 48, died with his door closed, before his parents noticed he had not turned off the stove and realized that something was amiss. This was also the way that Robbie Lowery, 79, passed away, shortly after her sister-in-law, a nurse, gave her a bath. These examples illustrate how quickly heat-wave deaths may occur, even when family ties are strong and people are not living in states of literal social isolation.

The North Lawndale victims probably died because they lived in extreme heat on the top floors of apartments without air conditioning. Being unemployed and impoverished, they had little money and could not afford better apartments, air conditioners, or electricity to run them. Furthermore, like all populations of the unemployed, they were more likely to abuse drugs and alcohol. Unlike those who died in the Latino community, many of these poor black decedents were young. In these and other cases, being alcoholics and drug abusers probably contributed to a failure to recognize the condition that they were facing, slowing reactions and creating specific risks, including dehydration. Many of these people had less endurance than the average resident and would have been less likely to navigate multiple stairs to exit their buildings. A larger, better-measured study would be necessary to know how neighborhood variables contributed to these conditions and factored into these particular deaths of old *and* young alike.

In the *CS* exchange, Klinenberg emphasized that his book "issues an explicit invitation for other researchers—quantitative and qualitative—to think more broadly about how to meas-

ure the effects of neighborhood social ecology on residents' health and welfare" (2004:525). Aside from disagreements about whether the differential mortality between North Lawndale and South Lawndale can be explained by focusing on the elderly or on those who died alone, Klinenberg's useful community study has highlighted numerous neighborhood-level variables that could account for death rate differences between North Lawndale and South Lawndale. We certainly can expect that some factors on his list—abandoned buildings, open spaces, commercial depletion, violent crime, degraded infrastructure, low population density, and family dispersion—contributed to the heat-wave deaths in North Lawndale above and beyond the effects of being unemployed, living on the top floor of a building, and abusing drugs and alcohol.

However, we should be cautious in concluding that these people died *because* of the social environment in which they lived, as Klinenberg states in *Heat Wave* (2002) and emphasizes in his CS response (2004). We would need more individual-level data to know how much weight to give such a neighborhood effects theory in accounting for these deaths. For example, we would need to determine whether the particular individuals who died were afraid to go on walks, had adopted a bunker mentality, or were simply not willing to make the effort to climb up and down flights of stairs in the extreme heat. We would need to know whether they were personally affected by low-population density or a depleted neighborhood infrastructure, or came from fragmented families. Moreover, without accounting for the younger deaths in North Lawndale, one cannot accurately explain the large gap between North Lawndale and South Lawndale.

For those familiar with the history of sociological writing about the black family, a notable finding is that it was the bordering *white* community where extended families were too fragmented to overcome the effects of the heat wave. None of the five Archer Heights decedents had ever been married. Two of them had been living together and essentially died together during the heat wave. The other decedents had been living alone. They appear to have been isolated from extended kin who may have been too distant or overwhelmed with other responsibilities to look after them. Having moved to the suburbs, leaving behind a lone relative in the

city, many family members were probably unable to provide effective support, as Klinenberg himself might have predicted. I wonder whether some of the white decedents might have had alcohol problems or complications from drug abuse similar to those that I discovered in many North Lawndale deaths. The white community may have simply been more tight-lipped about this. I also wonder whether these five white decedents, none of whom had any children to help support them, might have had a particular fear of outliving their savings. If so, such fears could have made them reluctant to turn on their air conditioners or incur the expense of getting them fixed.

What can be concluded about the impact of neighborhood effects on the North Lawndale deaths? In addition to the many variables that Klinenberg usefully brought to public attention, there may be other neighborhood effects that could operate through the particular individual circumstances which I discovered by knocking on the doors of the buildings in which the deceased had been living. If one lives in a neighborhood that has low access to jobs (as Klinenberg emphasized was true of North Lawndale), this may result in a greater likelihood of an individual being unemployed and, therefore, having a greater likelihood of abusing drugs and alcohol and living without an air conditioner. Furthermore, it is also possible that younger people could be afraid to walk the streets in areas with high crime rates. However, judging by the large number of younger persons who congregate on the streets in poor black communities, this could not be assumed: Letitia Thomas, 35, went for a long walk in the heat with her mother a few hours before she died.

While the data do not show that the North Lawndale deaths occurred *because* of the factors that Klinenberg (2002) names, some of the factors he identifies could quite reasonably contribute to a more complex explanation of the conditions affecting the mortality differences between North Lawndale, South Lawndale, and Archer Heights. Likewise, while I would not say that Klinenberg is wrong when he claims that hundreds of the heat victims were "old, alone, and impoverished," these data raise questions about the extent to which that was so.

CONCLUSION: THE PERTINENCE OF ROBINSON'S ECOLOGICAL FALLACY

Although ecological inference is necessary when individual-level data are not available, this is not a problem in the case of the Chicago heat wave because, as I demonstrate here, the individual-level data were still possible to collect almost 10 years later. In Chicago, mortality rates were higher among people who were elderly and living alone, but that does not necessarily lead to the assumption that the higher mortality rates in a particular community stemmed from these factors. As my data show, most of the North Lawndale heat wave victims had been living with others, and many had been quite young.

It is easy to see why even a creative and energetic researcher might have thought it would not be possible to obtain information on how individuals died:

The widespread belief that the heat wave victims had been largely abandoned by their families made it difficult to conduct reliable interviews with relatives of the decedents. Given the public discourse about the heat wave deaths, to ask a child or a sibling where they were when their relation died alone was also to accuse them of neglect. (Klinenberg 2002:248)

Yet, while children and siblings might possibly be fragile, this does not mean we cannot find informants who observed the decedents, knew their daily patterns, and could give us insight into the way they lived and died. It also does not mean we cannot check our facts against death certificates to try to develop some reliable approximation of what happened.

The ethnographic method lends itself to finding *actual* people whose lives correspond to the theories that sociologists employ to explain the social world. It is one of the great potentialities of the ethnographic method and certainly one of the warrants for such research (Katz 1997, 2001). If ethnographers cannot find the people to exemplify their theories about individuals, they have a less sound basis for sociological theorizing. By showing the people, they can generate more precise and accurate hypotheses for bigger, better-measured studies. And they can test easy generalizations about whole neighborhoods and cultural environments against knowledge of how individuals actually live and die. Ethnographers cannot necessarily

infer larger macro-level theories from the lives of their subjects. However, they should be prepared to show that individual circumstances of subjects can be reconciled with their sociological theories and that they can account for discrepancies between them.

The social autopsy technique has implications for the study of a larger set of social events: natural and man-made disasters. If an investigator, however, wants to know how people died, it is best to try to study individual-level morbidity and mortality before making general claims about how deaths fit into a broader social and political landscape. Because ethnographers have a special opportunity to show the people, they can avoid the perils of the ecological fallacy, allowing social theories to be firmly anchored in social facts.

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