

## THE IMPORTANCE OF PLACE

Like those of other living things, our structure, development, and behavior arise from a genetic foundation sunk in an environmental context. Yet while we readily accept that a healthy seed can't grow into a plant without the right soil, air, light and water, and that a feral dog won't behave like a pet, we resist recognizing the importance of environment in our own lives.

Winifred Gallagher

Flames leaped 200 feet into the air. A thick pillar of black smoke loomed over Birmingham, Alabama, on October 2, 1997 as a fire, punctuated by a series of explosions, consumed a large downtown warehouse complex. The warehouse, which burned for three days, contained heavy concentrations of hazardous chemicals. A 15-square-block area near the warehouse was evacuated because of the health risks. Hours after the fire started, ash continued to rain down from the sky onto pedestrians. Millions of gallons of water used to douse the fire flooded the sewer system and washed into Village Creek, a stream that periodically floods low-income neighborhoods on the western side of Birmingham, near the downtown.

Uncertainty surrounding the dangers posed by the fire and by pollutants released into the air and water continued for nearly a week after the fire began. Initially, state and county officials denied that hazardous materials had leaked from the warehouse. As early as the day after the

fire's start, however, newspapers reported that nearly 5,000 gallons of a highly concentrated form of Dursban (80 times the over-the-counter concentration) had been released into the water and air. Dursban is an organophosphate pesticide, a low-level nerve agent, known to cause health problems ranging from birth defects, chronic headaches and neuromuscular pain, short-term memory loss, nausea and vomiting, and breathing problems, to a condition known as multiple chemical sensitivity (U.S. Environmental Protection Agency 1997). Concerns over the safety of Dursban raised by the Environmental Protection Agency (EPA) led its manufacturer, Dow Chemical, to voluntarily restrict its marketing and revise instructions for application and use.

In the first few days after the fire began, residents living in the low-income, mainly African American neighborhoods near Village Creek reported smelling noxious fumes and experiencing a variety of physical symptoms including headaches and nausea. Dying fish and other signs of serious environmental problems were noticed in the stream that flows through their neighborhoods. It took almost a week, however, before any official response to residents' complaints. Six days after the fire, "no fishing" signs were posted, the Alabama Department of Environmental Management finally released test results on water and air samples. By then, the seriousness of the contamination was obvious. Village Creek had become a flowing stream of dead, rotting fish. Residents living along the creek complained to EPA lawyers about the slow response of local officials to their concerns. They believed that the spill would have been taken more seriously if the damage had occurred in a better-off neighborhood where residents were White. Indeed, it was only after the polluted waters began to wreak devastation further downstream, near those better-off residential areas, that more serious measures were taken. A temporary filtration dam was built to protect these areas from pollutants, but it failed. In a span of three weeks, almost 30 miles of waterway near residential areas were contaminated and hundreds of thousands of fish killed. The first legal actions were taken only after pollution began to wash ashore near higher-income, mostly White residential areas. Civil suits were filed on behalf of local residents in two of these areas (a residential area near Bay View Lake and one near the Black Warrior River).

These suits raised concerns about damage to the water supply and housing values.

Six months after the fire and the largest Dursban spill in history, contamination levels in some areas remained high, although the waterways showed signs of a slow recovery. While a number of reports of medical problems connected with Dursban poisoning have been received by the County Health Department, little is known about the long-term public health consequences of the spill. Blood samples taken from residents along Village Creek were lost, with few repercussions. Despite media coverage, surprisingly little consideration has been given to the mental or physical health consequences of the event in the Village Creek area. This spill represented a dramatic ecological event, but it was only one instance in a long history of environmental problems. Village Creek is a dumping ground for industrial waste, prone to other environmental problems such as periodic flooding. Residence here is stressful and dangerous.

The natural history of this disaster reflects a larger public health issue in the United States that continues to be pervasive in America's central cities. Persons living in neighborhoods with large concentrations of poor minorities are exposed to serious physical and mental health risks (Andrulis 1997; Charles 2003; Conrad 2009; Corburn 2009; Kawachi and Berkman 2003; Williams and Collins 2001). With limited resources to address these risks, residents have found existing agencies incapable or unwilling to deal with the wide range of problems encountered. Risky environments are not usually the ones where politically effective responses occur or where the greatest public efforts are made to address the problem. Yet, in this ineffective response to serious health needs, the health and well-being of the greater whole is affected. As Dr. Martin Luther King Jr. once reminded us: "Of all the forms of inequality, injustice in health is the most shocking and the most inhumane."

### **Place Matters**

Place is a key element in our identity. Who we are is reflected in the places we occupy and the spaces we control. These places range from nation to region, state, metropolitan area, community, neighborhood,

block, and residential dwelling. Each location has profound social meaning for us, and in a literal sense defines not only who we are, but also how we live and die. Despite the evolution of cyberspace technologies capable of transforming “theres” into “heres,” residence continues to have dramatic consequences for individual health and well-being. The prevalence and incidence of risks for a variety of physical and mental health conditions within metropolitan areas range widely by residential area. Most notably, life and death experiences in the inner city are more similar to those living in the Third World than to the experience of suburbanites living just a few miles away (Geronimus et al. 2001). Perhaps the most notorious examples of this situation are the neighborhoods of Harlem in New York City and Roxbury in Boston. Mortality rates in these places for Black men under 65 are more than double the rates of U.S. Whites and 50 percent higher than the rates for all U.S. Blacks (McCord and Freeman 1990, 2009).

For certain segments of the population, being in the wrong place is not a matter of timing or accident, *but rather a function of the social structure*. The places we live, work, and play are fundamental resources, like time or money. The access we have to these resources dramatically affects our well-being. All human beings live in a spatial world where everything and everybody has its place. Everyday lives are spatially structured. At the heart of this structure is a simple fact—there is distance between ourselves and the other actors and objects in our environment. To satisfy basic needs and interests we must either find ways of getting objects or actors we are interested in to come to us, or find ways of getting to them. Hence, where people live is of great importance.

Place matters in the contemporary world, but for different reasons than in the past. Our ancestors were place-bound by necessity. Indeed, for most of human life on earth we lived as hunters and gatherers, living off the land in small bands so isolated from each other that strangers were met with great suspicion and alarm.

Dramatic technological revolutions eroded this isolation in ever intensifying waves of change—first, an agricultural revolution 10,000 years ago, then an industrial-urban revolution 9,700 years later. During this vast period of time, the spatial horizons of people broadened as

transportation and communication technologies improved, trade expanded, and cities attracted large numbers of culturally heterogeneous populations. We are now in the midst of an information revolution. This third wave of change is technically capable of ending the isolation between people; yet spatial barriers persist in highly segregated cities with distinct inner-city and outer-city areas. Thus, as we progress through a new millennium, space is redefined and reshaped, and for some takes on heightened significance.

The enduring significance of place is truly remarkable, for technologies now exist to move people and resources vast distances in very short times, while information can be transported almost instantaneously to the most remote regions of the world. Distant places have attained a kind of “hereness” that was unimaginable just a century ago. Marshall McLuhan (1965) describes this new world as a “global village,” but this place has a more distant potential for certain segments of the population. Indeed, when surveying the urban geography, with its vast neighborhood differentials in health risks, the more appropriate spatial analogy may be that of an expanding universe of places moving farther away from each other, rather than closer.

There is good news and bad news contained in the reality of evolutionary trends. While technological developments in transportation, communication, and information processing give humans new capacities to break down spatial barriers, a socially structured spatial environment produces new barriers. These structures are the modern-day equivalent of the medieval city’s walls—separating portions of society from one another and preserving vast differences in levels of living and overall well-being. Awareness of the impact of these invisible barriers for the health and well-being of large numbers in our society may make it possible to develop programs to alleviate this spatial penalty. As Melvin Webber has suggested (1964), we have the technological capacity to live in a “non-place urban realm” where the friction of distance is minimized. At present, however, we live in a bifurcated world of possibility and actuality. There is the potential for a non-place urban realm, but at the same time there is the reality of a highly segregated city perpetuating an ecology of disadvantage.

### Why an Urban, Place-Based Approach to Health?

There is an ecology of disadvantage in America, and one of its most significant outcomes is the “urban health penalty” (Greenberg 1991). This penalty is important to understand for several reasons. First, we live in an urban society. While a century ago only 25 percent of the population resided in urban areas, now three-fourths live in a metropolitan area consisting of one or more principal cities and a ring of suburbs. Second, experts generally agree that the single most important global environmental influence in this century is the process of urbanization itself (Gallagher 1993). A majority of the world’s population now lives in cities, and in the next three decades nearly three-fourths of the world is likely to be urban (Galea et al. 2005; Mercado et al. 2007). The impact on the ecosystem of such an event is potentially serious, with dramatic increases in pollution, consumption of non-renewable resources and irretrievable losses of millions of known and unknown animal and plant species (Meadows et al. 1972). Third, the city is a distinct social environment that over time has accentuated great inequities between peoples. Within its boundaries dramatic variation exists in material wealth, personal well-being, and overall quality of life. Finally, the city is an artificially constructed environment, an “intentional” or “built” environment, and thus it can be re-engineered to promote more desirable health outcomes. Unlike natural disasters, the disasters befalling some of our inner cities are preventable.

Data on the largest cities in the United States (Andrulis 1997; Benbow 2007) suggest the health costs of urban residence. Among the most striking observations are:

- The murder rate in America’s large cities is more than 2½ times the national average.
- The infant mortality rate in large cities is 25 percent higher than the U.S. average.
- Of the 880 most disadvantaged neighborhoods identified by the Child Welfare League, 99 percent were located in cities.
- Forty percent of urban children live below the poverty level.
- The HIV mortality rate is over 3 times higher in large cities.

- The incidence rate for tuberculosis in large cities is  $2\frac{1}{4}$  times the national average.
- The mortality rates for cancer, heart disease, and diabetes are considerably higher in the nation's large cities.

The health problems of urban residents are most severe in the inner city and some of the city's aging suburbs. Here the circumstances of poverty and minority status are exacerbated by segregation; the spatial concentration of these two characteristics intensifies the disadvantages of low income and minority status. Indeed, the American College of Physicians concludes: "One of the most important characteristics [of the health care challenge] is the interrelationships among health and social and environmental problems. The so-called 'urban health penalty'—the confluence of circumstances such as poor nutrition, poverty and unemployment with deteriorating housing, violence and loss of services—has created a deepening health crisis in the inner city." A medical approach, in other words, can no longer be sufficient to reduce the differentials that exist in American health because health risks are spatially and socially structured. Indeed, there is growing realization within medicine and public health that societal forces shape and create the disease patterns experienced by a society, and that successful health interventions require addressing the social factors that produce them (Cockerham 2007; Link 2008). Place is a critical social factor.

While the concepts of place and environment are essential to understanding physical and mental health outcomes in society, they are broad, multidimensional constructs. Place can be defined as a portion of space regarded as measured off or distinct from other spaces. It can be conceptualized as a position or location in space. The environment can be thought of as the totality of surrounding conditions, as an area in which something exists. Both concepts imply a force, which is more than physical in character. As an environment, a place can be seen as a container whose characteristics derive primarily from what is contained within its recognized boundaries. These contents involve physical, cultural, and social components.

As a point or portion of space, spatial coordinates can define a place,

and hence it has physical qualities. But it is also a space, which is socially, culturally, economically, politically, and psychologically defined. The places occupied by individuals are thus not just physical entities characterized by physical positions in space or by the characteristics of those elements contained within the spaces. They are also mental constructs, psychologically defined by individuals who occupy certain social positions and possess a particular set of cultural values. Each person carries around a set of mental maps that are a product of personal experiences, cultural stereotypes, preferences, and objective information. We live in personal worlds, so that the very same places may be understood and defined very differently by persons with different sociocultural backgrounds and personal experiences. One person's heaven may be another's hell. Understanding the relationship between environment and health thus requires a careful analysis of environments in all their complexity, for place is a multidimensional construct.

### **Ghetto Poverty Tracts: A Definition**

This book deals with the impact of place on health, specifically poor urban neighborhoods and their importance for residents' health. The term *inner city* is used frequently in both the popular and scientific literature on urban areas, yet that concept is deceptive because not all poor urban neighborhoods are centrally located; metropolitan poverty is sometimes concentrated in aging suburbs. Perhaps the closest thing to a formal designation for the spatial concentration of poverty is contained in the work of urban researchers such as Wilson (1996) or Jargowsky and Bane (1991), who use U.S. census data to designate "ghetto poverty census tracts." Ghetto poverty areas are census tracts within Metropolitan Statistical Areas (MSA) where the household incomes of at least 40 percent of residents are below the poverty line. Researchers have noted several significant trends in these ghetto areas over the last four decades: (1) the number of ghetto areas more than doubled during the 1970s and 1980s; (2) the ratio of poor to non-poor in ghetto areas increased dramatically; (3) the African American presence in ghetto tracts grew substantially; (4) while these trends tended to reverse themselves in the

1990s, they began to re-escalate in the first decade of the twenty-first century (Jargowsky 2003; Kneebone and Berube 2008; Wilson 1996). Today, nearly half of metropolitan-area Blacks live in ghetto tracts that increasingly isolate the metropolitan Black poor from Whites and non-poor Blacks.

While there is considerable debate over the issue (Massey and Denton 1993), Wilson (1980, 1987, 1996) believes that the growing concentration of Black poor in ghetto tracts represents a new trend in urban minority poverty. Wilson argues that the recent trends in ghetto poverty tracts are more than just an outgrowth of the processes of racial and class segregation. He believes that as jobs left the central city during the 1970s and 1980s, so did non-poor Blacks, and as jobs and middle-class Blacks left, both the ghetto economy and ghetto community collapsed. He contends that the current concentration of minority poor occurs faster and for different reasons. In the past, ghettos and slums, while products of dramatic racial segregation, were more organizationally stable because they contained a wide range of economic institutions and a sizable population of non-poor who served in positions of leadership in the community.

Though they may have lived on different streets, blacks of all classes in inner-city areas . . . lived in the same community and shopped at the same stores. Their children went to the same schools and played in the same parks. Although there was some class antagonism, their neighborhoods were more stable than the inner-city neighborhoods of today; in short, they featured higher levels of what social scientists call “social organization.”

(Wilson 1996:20)

While Wilson uses the concept *inner city* to describe concentrated urban minority poverty, *ghetto poverty tract* is more technically accurate and so we choose to use the latter term.

### **Place as Life Chance and Risk**

Every place we live in has certain levels of *hazard* and *risk* associated with its various social, cultural, and physical components. A hazard is a

situation that, under particular circumstances, could lead to damage or harm to a human being or a population. It is thus a collection of situations and circumstances. An example might be the situation of a curving, deteriorating road, which, under the circumstances of heavy traffic and light rain, could result in a multicar accident. Or in the case of the Birmingham warehouse fire, the situation was an unprotected stream, Village Creek, which frequently received runoff from the industries located around it. The circumstances which, in combination with this situation, led to the potential for serious environmental damage and human loss were: (1) a warehouse without adequate fire safety features, (2) heavy concentrations of dangerous chemicals stored in that warehouse, and (3) a metropolitan area and state with an ill-prepared emergency response team. Risk is defined as: "the probability of damage or harm in a specified period [and place]" (Royal Society Study Group 1992:3). In essence, risk is the likelihood of a hazard causing harm to an individual or population.

Beck (1995) has argued that risk and hazard are of particular importance in advanced modern societies ("risk societies") where a system of rules has developed to deal with industrially produced risks and insecurities. The calculus of risk, developed in the work of physical scientists, engineers, and public health professionals, has become the "mathematical morality of the technological age." In this form of reckoning, the risk of a decision or activity is calculated as a mathematical probability and is no longer defined as potential harm to individual human beings. That is, risks are borne by a population rather than by individuals. After scientists calculate risks, they are judged to be either more or less acceptable, and strategies are devised to contain risk within some acceptable range.

Once risks are established, a series of protections can theoretically be devised to reduce the probabilities of harm or loss attached to certain decisions and the circumstances that surround them. In an advanced, high technology society such risks can be very high. Some people will be more affected by the growth of these risks than others; that is, what Beck (1995) calls "social risk positions" develop which follow the inequalities of place and class standing. In the "risk society," levels of hazard and risk are differentially distributed in the urban landscape, and the distribution

of risk and hazard in turn differentially affects health outcomes. Each level of residential place from nation to region, state, metropolitan area, community, neighborhood, block, and dwelling can be assessed in terms of health risks and hazards.

Places are environments consisting of physical, cultural, political, economic, and social components, with each component contributing in complex ways to the differential risks experienced by a population. At one level, place can be seen as a means of objectifying the complex set of risks that come together to affect a population's health—in short, a method for reporting health risk data. But it is clearly more than just a unit by which the health of a population can be reported and analyzed. Place is a meaningful unit, not simply because a population uses various places as the stage on which to carry out its behaviors and actions, but because the stage (or place) itself shapes these actions and experiences. We are who we are, and we experience what we do on a daily basis in part because of where we find ourselves. Our physical and mental health is a product of not only how we live, but also where we live.

Environments are *risk spaces*. The most obvious place-based health risks are associated with physical aspects of an environment. These include such things as harmful chemical agents, pollutants, viruses, and bacteria contained in a local space as well as the quality and arrangement of built and natural physical features in a place (architecture, building deterioration, building materials, paint, landscape, etc.) that may present seen and unseen hazards for the occupants. But places also contain psychological and social risks as well. Some areas are decidedly more stressful, with too much noise, too many people, or just an overload of stimuli. Other places expose individuals to strangers where interactions are less secure and predictable, or to situations where hostile, aggressive interactions are possible. In many cases, the risks associated with place are heavily concentrated in just a few areas. Not surprisingly, such areas tend to occur where residents are least equipped to respond to the challenges imposed by place—such as Village Creek in Birmingham, the Roxbury area of Boston, or New York's Harlem.

### Place as Social Resource

Just as the areas of a city can be viewed as risk spaces containing differing levels of hazard, cities are *resource spaces* where the goods and services capable of protecting inhabitants from harm are also differentially distributed. That is, cities have a topography both of risk and of protection. This topography, as Beck (1995) notes, tends to follow the shape and structure of the larger society, with the most visible distinctions occurring at the opposite ends of the system of stratification. Each metropolitan area reflects the contours of the society, with risk heavily concentrated in the inner zones of the metropolis where there are significant concentrations of low-income, underemployed minorities. At the same time, protection from risk, in terms of availability of health professionals, community resources, and supportive social networks, tends to be inversely related to risk and risk locations. These are not merely matters of material differences between people but reflect a larger fabric of inequality only partially related to income. This inequality has become more obvious as the geography of inequality has become more apparent in America's cities. Historically, slums were so successfully hidden from the daily activities of middle-class consumers of the city space that they seemed non-existent. Indeed, the term *slum* is believed to derive from the word *slumber*, because slums were composed of "unknown, back streets or alleys, wrongly presumed to be sleeping or quiet" (Partridge 1958). While patterns of residential segregation still permit most metropolitan residents to avoid slums on a daily basis, the geographical spread of the high-poverty ghetto and its multiplicity of problems make such places hard to ignore. They are certainly not sleeping or quiet, and the long-term implications of such concentrated risk for the society as a whole are significant.

Wilson (1996), in his discussion of the inner city, notes a substantial change in the character of the areas where minority poverty concentrates. Lower levels of "social organization" characterize the inner-city neighborhoods of today. He notes several optimal dimensions of neighborhood social organization: (1) the prevalence, strength, and interlocking of social networks; (2) the degree to which neighbors take personal

responsibility for neighborhood problems; (3) the extent of surveillance done by neighbors; and (4) the degree of participation in formal and voluntary organizations tied to the neighborhood and to the larger community. Social organization in this sense is a critical protection against hazard and risk. Areas where there is a concentration of weak social networks, limited feelings of personal responsibility for neighbors, low levels of surveillance, and limited participation in the institutional network of the community are also areas where vulnerability to the risk of environmental *hazard* is concentrated. This susceptibility to risk becomes all the more important in areas with limited economic and political resources and high levels of *hazard* to begin with. The risks themselves are cumulative; that is, the hazardous nature of a given environmental circumstance intensifies under the absence of protection. Strong organizational structures in an area can serve as a form of inoculation against stress and ill health. Neighborhood context can promote a culture of vigilance and responsibility that mitigates against local hazards and risk, while at the same time empowering individuals to take action against the hazards present in local spaces.

Place is a force in the lives and health of a population apart from the individuals and risks associated with that place; it is a real factor in personal well-being. Individual choices and actions take place in spaces which in turn shape and structure those choices and actions. Places are the stages upon which social and cultural forces in the larger society affect individuals. In this sense, the spatial division between high-poverty ghetto areas and the rest of the metropolis is a reflection of the U.S. society's structure itself; the spatial distance between populations reflects their social distance, their position within the larger society (LaGory and Pipkin 1981). The existence of the high-poverty ghetto is geographic testimony to the dramatic socioeconomic divide that persists between certain minority groups (most notably African Americans and Hispanics) and mainstream America. Cities from their very origins were founded on differences, just as the societies, which contained them, involved a system of stratification. In preindustrial cities, these differences were primarily between the urban resident and the peasants. Walls were erected to regulate access to the city's resources and to protect the

system of differences that prevailed in society. The social distance between citizen and peasant was dramatically symbolized and reinforced by the city walls. The contemporary city is heterogeneous, yet real barriers exist between residents.

The contemporary city's walls are not like the physical structures of the preindustrial city, but there are real physical and mentally constructed barriers between the populations that reside there. The barriers are reflected in pervasive patterns of segregation, with those groups at the bottom of the social system most highly segregated from others. As groups assimilate into the larger society they are less likely to be concentrated in certain areas and tend to disperse across the urban landscape. This does not mean, however, that minority groups, which scatter across the metropolis, are any less likely to be segregated. For example, while middle-class African Americans have dispersed spatially, they remain highly segregated from Whites. Indeed the most significant feature of U.S. residential patterns in the last 60 years has been the concentration of Blacks in central cities and Whites in suburbs (Booza et al. 2006; Charles 2003; Massey and Denton 1993). While Black suburbanization has occurred, only a small percentage of Blacks live in suburbs, and most of those live in highly segregated, older suburbs.

Segregation is a powerful spatial force protecting the status quo and separating groups from one another. Highly segregated groups find themselves isolated from the organizational structures and resources necessary to promote health and well-being (Mitchell and LaGory 2002). Thus, segregation ensures that neighborhoods with limited resources for protection against risk will be particularly vulnerable, since their isolation restricts their access to the range of resources available in the larger community. Places with weak social organization that are also highly segregated promote an existence very different from the rest of the society. This type of segregation creates walls as real and impermeable as those in ancient preindustrial cities.

Insularity is likely to promote cultural differences across the urban landscape as well. Places in which outside contact is restricted become fertile ground for the promotion of subcultures and lifestyles associated with high-risk behaviors. There is strong evidence that pursuing a

healthy lifestyle can enhance health and life expectancy (Cockerham 2007). It is also well known that certain lifestyles have negative health consequences. Unprotected sex, promiscuous sexuality, and intravenous drug use increase the risk of contracting AIDS. Smoking is linked to lung cancer and heart disease, alcoholism to cirrhosis of the liver. Participation in gangs increases the exposure to violence and risk of physical injury, while high-fat diets accelerate the risk of heart disease and atherosclerosis. Segregation may be linked to the promotion of unhealthy lifestyles by creating the conditions in which access to mainstream role models is highly constrained and access to deviant institutions and deviant subculture is intensified. In criminology, differential association theory (Sutherland and Cressey 1960; Taylor 1988) suggests that individuals develop deviant lifestyles because of their exposure to certain contexts. Certain lifestyles, in other words, are more likely to be learned because individuals in highly segregated settings experience greater exposure to deviant subcultures and greater isolation from more traditional health lifestyles.

Besides promoting subcultural differences in health lifestyles, segregation can enhance the negative circumstances of already stressful high-poverty environments. Since the mental well-being of individuals undergoing stress is in part a function of their social resources, it stands to reason that the range of these resources will have an impact on health. People living in spatially constrained communities have spatially constrained support systems, and hence may be more likely to experience the negative consequences of stress (Haines and Hurlbert 1992).

### *The Multidimensional Nature of Place*

The neighborhood is an important place for the provision of protection against risk, and much of our discussion focuses on that spatial level. Aspects of protection and risk, however, manifest themselves in a variety of environmental layers. These layers range from the home, to the neighborhood, the community, the metropolitan area, region, nation, and globe. Place is a multidimensional, hierarchical phenomenon. All human action occurs in space, but this space is more than a physical

container; it is a social and cultural phenomenon as well. Barker (1967) portrays places as “behavior settings.” A behavior setting is bounded in space and time and possesses a structure that interrelates physical, social, and cultural properties in a particular way so that certain patterns of behavior are likely to be elicited. Place involves far more than a physical setting. While a place’s character is a function of physical qualities, it is also a product of risks and opportunities, the nature of the social organization attached to the locale, its political, social, and economic relationships with other places, the psychosocial characteristics of the individuals occupying the space, and the local cultural milieu. We learn to act in specific ways in certain places; we don’t genuflect in bars or drink beer or eat popcorn in churches. Hence, our actions in various places are conditioned by a number of factors, all of which may operate on the individual to affect not only their behavior, but also their health. This relationship between place and health has not been adequately explored. Its importance, however, is undeniable. The complexity of this relationship is equally indisputable. Places are more than spaces. They are both real geographic units with physical, social, and cultural properties as well as personally defined places—both aspects of place matter for health.

### **A Framework for the Book**

As our discussion suggests, residential areas are more than a simple reflection of the existing system of inequality. Place, and the process of segregation that creates it, actually plays a role in the health and well-being of its occupants. The purpose of this book is to understand that role. In doing this, we explore the nature of residential space, with our focus on the high-poverty ghetto and the impact it has on individual and social life. At the same time, we review existing social science theories of health and suggest how they might be incorporated into a broader understanding of the ecology of health and its implications for the “urban health penalty.”

The Birmingham case study, introduced at the beginning of this chapter, is not an isolated event. It is evidence of a recurring theme in American public health that reminds us of the power of place. While the

Village Creek Dursban spill received considerable media attention, it is but one episode in a more complicated daily drama reproduced across many American high-poverty neighborhoods. Over the past several decades, poverty has become a distinctly urban problem with growing numbers of very poor minority neighborhoods bearing the burden of the “risk society.” Throughout the book we link specific aspects of this trend with broader themes of place and health contained in the chapters.

Chapters 2 and 3 discuss general issues related to human territory and the organization of residential space. Chapter 2 addresses the question of territorial behavior in humans. In what sense are humans ecological actors? Since all human thought and action takes place in physical and social contexts, how do the socially ordered spaces in which we reside affect human thought and action? Do humans have basic spatial needs?

Chapter 3 introduces the reader to the importance of space for everyday urban life, exploring both micro and macro environments. It begins with a discussion of how various features of the built environment shape our experiences. Winston Churchill observed that once we have built our buildings they begin to shape us. What features of architected spaces affect us, and how does the design of residential space relate to the nature of individuals contained within it? Are there such things as “healthy” and “unhealthy” buildings, and if so, what features distinguish them from one another?

Considering the macro environment, what features of the city differentiate it from other residential areas? We detail these basic dimensions of the urban residential space, which include segregation, density, size, and opportunity. In addition, we show how the social sciences describe the city’s basic structure and form, and the pattern of health resources made available to different subgroups within the city. Finally, this chapter also examines how the urban structure influences choice and action for the average resident.

Chapter 4 provides an overview of the major social science models of health: health beliefs, health lifestyles, risk and protective factors, psychosocial resources, and neighborhood disadvantage. These models represent current understanding of the possible social influences on health. While each model has the potential to provide insight into the role of

context on health outcomes, only the urban disadvantage perspective has explicitly looked at the role of context on health. To detail the consequences of spatial structure for physical and mental health, we explore the following: (1) the relationship between place variables and various aspects of culture, including health beliefs and health lifestyles; (2) the relationship between place and an individual's access to health resources; (3) the impact of place on risky circumstances; (4) a place's influence on social networks and supports, and an individual's access to protection against risk; and (5) the confluence of neighborhood physical and social deterioration and its impact on behavior and important health risk outcomes. In so doing, we develop a synthetic model of the ecology of health. This chapter provides the springboard for developing a place-based understanding of the health disparities that exist among persons living in highly developed urbanized societies.

Chapters 5 and 6 take the synthetic theory developed in the previous chapter and apply it to specific health-related issues for high-poverty ghetto populations. Beginning with Chapter 5, we review an extensive empirical literature that shows the city to be a mosaic of risks and protection. Typically, the risk and protective factors model has been used to explain health-compromising behaviors among adolescents; here we explore its applicability to a variety of other subpopulations. Chapter 5 begins with a discussion of the physical and sociocultural aspects of risk and their consequences for urban residents. In addition, we consider the role of informal networks and formal services in providing a layer of protection, particularly for those residents who lack the full range of resources available to the average citizen. Specific physical and mental health outcomes are inventoried as consequences of the risk-laden circumstances present in the high-poverty ghetto. This inventory of health outcomes is applied to a set of special at-risk populations in the following chapter.

Chapter 6 examines the needs and risks of the socially disadvantaged. It begins with an exploration of the work of Wilkinson (1996) on the role that social inequality plays in the general health and well-being of populations in highly developed societies. Wilkinson shows that the least-healthy developed societies are those with the widest gaps between the

advantaged and disadvantaged, and those with the greatest sociocultural separations between groups. To show how this relationship plays out in the residential areas of American society, we look at two special populations—the homeless and racial and ethnic minorities. The homeless are a particularly important population to consider when studying the ecology of health. They are by definition persons without place. The absence of place, and more particularly control over residential space, has specific physical and mental health consequences. In addition, we look at the so-called underclass from various theoretical perspectives, showing how segregation intensifies their disadvantaged status, and then showing the role that high-poverty ghetto areas play in promoting specific health outcomes related to health beliefs, lifestyles, and risks and protections.

In a later section of Chapter 6, age-related at-risk populations are identified at the two extremes of the life cycle—the young and the old. We first describe characteristics of the young and the old as ecological actors, suggesting the significance these characteristics have for an ecology of health. Both groups find their access to places somewhat constrained by their location in the age stratification system. The discussion of youth focuses on the impact that growing up in the high-poverty ghetto has on development, and the particular physical and mental health challenges associated with residence in such places. We explore the qualities of the individual and the social network necessary for resilience in this challenging environment.

For elders, place is imbued with great meaning, so that social psychological factors such as place memories, perceived risk and fear, neighborhood satisfaction, and mental maps can play an important role in healthy aging. The impact of age segregation on health is a particular focus. Segregation by age in urban areas structures risk and protection and shapes the role these two factors play in the health of place-bound elders.

Chapter 7 concludes by proposing an ecological strategy for health promotion in the high-poverty ghetto. We begin by suggesting that the literature on context-based health effects could leave readers with a misunderstanding of the most appropriate health promotion policy. This literature routinely concludes that while there is a contextual effect on health, individual-level effects, in the form of health beliefs, risk-taking

behaviors, genetic predisposition, and so on, are considerably stronger. Although these conclusions are accurate, they have the potential of misdirecting health policy. The fact that individual-level effects are stronger by no means implies that individual-based strategies are the most effective ways to promote health and deliver services in the urban area. Well-designed place-based approaches to health can serve the dual purpose of promoting healthy places, while also efficiently delivering information and services to high-risk individuals.

We believe that a place-based approach to health is a promising perspective from which to address significant health disparities and plan for the healthy society—a major objective in the federal government’s health goals for the new millennium (U.S. Department of Health and Human Services 2000). Without a comprehensive place-based strategy to address the health needs of the at-risk, underserved, and unprotected in the urban core, America will continue to be a society plagued by the contradiction of great wealth and mediocre health.

In this final chapter, we review two types of strategies for addressing place-based problems—removal strategies and community development strategies. We conclude that comprehensive community-based approaches to health are likely to be most successful, and we urge that they be local efforts based on the federal model of the demonstration research and evaluation programs. These community-oriented strategies should invite significant local participation and target the special risks and hazards facing residents while also seeking to identify those individual characteristics that promote resilience.