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Crime Places within Criminological Thought

A new perspective in criminology has emerged over the last three decades, a perspective with considerable potential to add to our understanding and control of crime. In the same way the invention of the microscope opened up a biological world scientists had not previously seen, this new perspective opens the world of small geographic features we had overlooked. Research has demonstrated that actions at these microplaces have strong connections to crime. Just as the microscope paved the way to new treatments and advances in public health, this new perspective in criminology is yielding improved ways of reducing crime. This new perspective shifts our attention from large geographic units, such as neighborhoods, to small units, such as street segments and addresses. This shift in the "units of analysis" transforms our understanding of the crime problem and what we can do about it.

There are two aspects to this shift in units. The first shifts our attention from large geographic units to small ones. This we have just mentioned. The second shifts our attention from people to events, from those who commit crimes to the crimes themselves. Criminology has been primarily focused on people (Brantingham and Brantingham 1990; Weisburd 2002). Frank Cullen (2011) noted in his Sutherland Address to the American Society of Criminology in 2010 that the focus of criminology has been even more specific. He argued that criminology was dominated by a paradigm, which he termed "adolescence-limited criminology," that had focused primarily on adolescents.

To what extent have person-based studies dominated criminology? Weisburd (2015a) examined units of analysis in all empirical articles published in *Criminology* between 1990 and 2014. *Criminology* is the highest-impact journal in the field and the main scientific publication of the largest criminological society in the world, the American Society of Criminology. He identified 719 research articles. Of the 719 articles, two-thirds focused on people as units of analysis. The next main units of study were situations (15 percent) and

macrogeographic areas such as cities and states (11 percent). Eck and Eck (2012) examined the 148 research papers published in *Criminology and Public Policy* from its first issue in 2001 until the end of 2010, and the 230 articles published in *Criminal Justice Policy Review* during the same time period. Fifty to 60 percent of the articles described policies toward offenders (providing assistance or coercion), and 30–40 percent dealt with an assortment of topics describing policy administration, technology, descriptions of criminal behavior, or criminological perspectives. Less than 10 percent dealt with preventing crime events by blocking crime opportunities. Catching criminals, convicting them, sometimes imprisoning them, and sometimes rehabilitating them naturally leads us to the individual as the primary focus of criminal justice interventions (Weisburd 2008).

Understanding why people commit crime is important, and so is understanding the processing of individuals through the criminal justice system. However, the dominance of the person-unit perspective has left the impression that the study of criminality has always been the main focus of criminology. It obscures the fact that from the first studies of crime, researchers have gained insights into crime and its prevention by examining the distribution of events over geographic areas. In the early development of criminology, geographic units of analysis were particularly critical. European scholars such as Guerry (1833) and Quetelet (1831) looked to see how crime varied across large administrative geographic units. These studies in the first half of the nineteenth century helped to encourage a positivist criminology focused on empirical data about crime (Beirne 1987). The founding generation of criminologists in the twentieth century also looked to large geographic areas to understand and do something about the crime problem. Led by Robert Park, William Thomas, Louis Wirth, Ernest Burgess, Clifford Shaw, and Henry McKay, members of the Chicago School of Sociology saw communities as central to our understanding of crime (e.g., see Burgess 1925; Shaw 1929; Shaw and McKay 1942).

This community perspective on crime had strong impacts on theories about the etiology of crime (Reiss 1986; Sampson and Wilson 1995). In particular the social disorganization perspective is directly drawn from community studies of crime in Chicago (Bursik 1988; Sampson 2008; Sampson and Groves 1989; Sampson et al. 1997). Weisburd (2015a) found that only 7 percent of the articles in *Criminology* focused on communities or neighborhoods. Nonetheless, the impact of this perspective on crime prevention has been substantial. Many crime prevention programs are geared toward communities (Corsaro and McGarrell 2009; Corsaro et al. 2013; Dalton 2002; Tita et al. 2006). The broken windows theory (Kelling and Coles 1996; Wilson and Kelling 1982), for example, looks to developmental processes in communities as a key factor in understanding and controlling crime. And the importance of community in crime control can be seen in the large impact that community policing has had on policing in the United States (Hickman and Reaves 2003; Maguire and Mastrofski 2000).

Although people and large areas have been the most commonly examined units of analysis for criminological researchers, there is another perspective with possibly greater potential, a unit of analysis that has been virtually ignored until recent years. This unit is focused on microgeographies, or what we term "place." In studies to date it has been defined in different ways. As we detail later, some scholars define place simply as individual facilities, such as schools or community centers (Clarke and Eck 2007; Eck et al. 2007; Kautt and Roncek 2007), others look to street addresses (Pierce et al. 1988; Sherman et al. 1989), others to street segments (Andresen and Malleson 2011; Weisburd et al. 2004; Weisburd et al. 2006; Weisburd et al. 2012), and still others to clusters of street segments with similar crime problems (Weisburd and Mazerolle 2000; Weisburd et al. 2006). What these perspectives have in common is their recognition of the importance of microgeographic units for our understanding of the crime problem and our efforts to control crime. The "criminology of place" (Sherman et al. 1989; Weisburd et al. 2012) or study of "crime and place" (Eck and Weisburd 1995) suggests a new unit of analysis for criminology.

Beginning with the Minneapolis Hot Spots Patrol Experiment (Sherman and Weisburd 1995) a series of studies has shown that crime prevention focused on microgeographic units of analysis can have strong crime prevention gains. Indeed, the National Academy of Sciences concluded in a report on police practices and policies in 2004 that "studies that focused police resources on crime hot spots provided the strongest collective evidence of police effectiveness that is now available" (National Research Council 2004, 250). A Campbell systematic review by Braga et al. (2014) comes to a similar conclusion. And situational crime prevention studies focused on microgeographic units show similar promise (Eck and Guerette 2012).

The emergence of a large and sound body of empirical evidence about crime places contrasts with the fact that this body of knowledge has been largely overlooked by criminologists. In the review of articles in *Criminology* by Weisburd (2015a) we noted earlier, only 4 percent were focused on microgeographic units of analysis. There is some suggestion of a developing interest in this area of work. Figure 1.1 shows the percentage of articles examining microgeographic units in *Criminology* in five-year intervals. What is clear is that there is a growing trend of interest. Indeed, the percentage of articles in the journal focused on microgeographic units more than doubled comparing the first to last periods. Nonetheless, the absolute number of studies is still very small. Eck and Eck (2012) found an even more startling lack of interest in places in their review. Not a single study published in the two journals they examined focused on microgeographic units. This is particularly surprising, given the strong research evidence for place-based prevention described in Chapter 6. Much of this evidence was developed during the period that Eck and Eck reviewed.

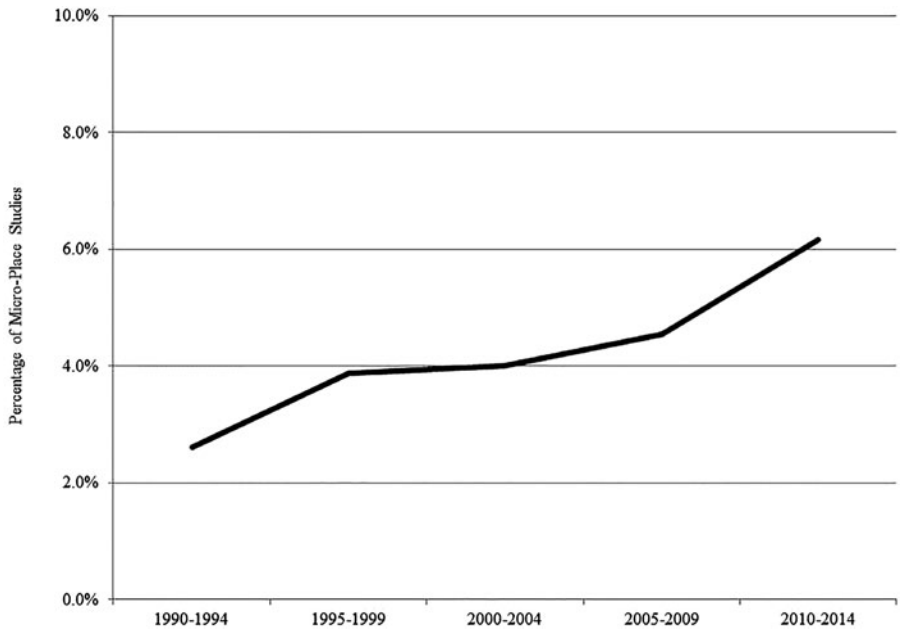

FIGURE 1.1. Changes in rates of microplace studies published in *Criminology* over time. *Original source*: Weisburd, D. (2015). "The law of crime concentration and the criminology of place." *Criminology*, *53*(2), 133–157. Courtesy of Wiley.

Similarly, courses that teach criminological theory rarely use books that discuss microgeographic units of analysis. When examining the textbooks used in courses that teach criminological theory to undergraduates at the top ten criminology programs, we found that only six of the twenty-three different textbooks discuss issues related to microgeographic units of analysis, such as hot spots policing or diffusion of crime control benefits.[1]

Recognizing this dearth of attention to the criminology of place, we thought it was time to compile what is known about this important new area of study, and to describe fruitful directions for further research and improved practice. In this chapter we want to introduce our work by first addressing some key definitional problems. We begin by discussing the relevance of crime and place to criminology. Does the relative paucity of work in the main journals in the field mean that this area of work should not be seen as a key concern of criminologists? We then turn to the unit of analysis problem. Do the multiple microgeographic units that studies in this area focus on mean that we really do not have a systematic focus of study? Do such problems plague criminology focused on communities and people as well? We then examine what is new in the study of the criminology of place, and how it offers opportunities to gain new insights. In concluding we describe the chapters that follow.

IS THE STUDY OF CRIME AND PLACE "CRIMINOLOGICAL"?

We have already noted that crime and place studies have been peripheral in criminology, at least following the reviews that have been carried out. Is that because crime and place studies are not really within the domain of criminology?

Merriam-Webster's dictionary (2015) defines criminology as the "study of crime, criminals, and the punishment of criminals." Clearly the study of crime places falls within this definition of criminology. It relates to the study of crime (e.g., Andresen and Malleson 2011; Block and Block 1995; Sherman 1995; Sherman et al. 1989; Weisburd et al. 2004), how places interact with crime (Brantingham and Brantingham 1993b; 1995; Weisburd et al. 2004), and the reaction of society to crime – perhaps not simply in the punishment of criminals at places, but certainly in the ways in which places can be used as a focus for controlling crime (Braga and Weisburd 2010; 2012; Mastrofski et al. 2010; Weisburd 2008).

The most influential criminologist of the last century, Edwin Sutherland, defined criminology in 1924 as "the body of knowledge regarding crime as a social phenomenon that includes within its scope the process of making laws, of breaking laws, and of reacting toward the breaking of laws" (1). Again the making of laws, the breaking of laws, and the reaction of society to crime are part of the study of crime and place. Some place-based interventions are focused on how law can be used to prevent or control crime (Mazerolle and Roehl 1998; Mazerolle et al. 2000; Weisburd 2008), others on where laws are broken (Andresen and Malleson 2011; Sherman et al. 1989; Weisburd et al. 2004; 2012), and still others, as we already noted, on societal responses to crime, for example through hot spots policing (Braga and Bond 2008; Braga et al. 1999; Sherman and Weisburd 1995; Weisburd 2008; Weisburd et al. 2006).

Part of the definitional problem of crime and place studies comes from the fact that criminology has often focused on particular disciplinary perspectives. For example, some criminologists think of criminology as simply a specialty of sociology (Akers 1992). We do not agree, since economists, psychologists, lawyers, political scientists, and geographers, for example, have all contributed to our understanding of the crime problem and how we can respond to it (Becker 1968; Bushway and Reuter 2008; Feeley and Simon 1992; Fyfe 1991). Indeed, advances in criminological theory are often the result of inter-disciplinary conflict or collaboration.

It is true, however, that most criminologists see criminology as centrally focused on why people commit crime, and this is reflected in the reviews of empirical studies described earlier. It is interesting to note in this regard that Edwin Sutherland (1947, 5), in early versions of his well-known textbook in criminology, discussed at the outset the importance of crime places: "a thief may steal from a fruit stand when the owner is not in sight but refrain when the

owner is in sight; a burglar may attack a bank which is poorly protected but refrain from attacking a bank protected by watchmen and burglar alarms." But in Sutherland's view, as that of other criminologists at the time, the "provision of an opportunity for a criminal act" provided by places should not be an important concern for criminologists. Crime opportunities provided by places were assumed to be so numerous as to make focus on places of little utility. There were too many potential crime sites to guard them all, all of the time. So Sutherland crafted a theory of differential association that would allow us, at least in theory, to prevent crime by getting at the source of criminal acts, criminal motivation.

Most theories of crime have focused on this problem. Criminology in most places became the study of why people commit crime. This focus on motivation in turn was to dominate criminology at least until Cohen and Felson published their groundbreaking article on routine activities and crime in 1979. That article was perhaps the first to argue that the offender was only one part of the crime equation. It laid out a crime equation we will discuss in more detail in later chapters, in which crime could be affected by influencing the routine activities of victims, guardians, and offenders in their geographic context without influencing the motivations of offenders.

Another reason that crime and place studies failed to become a central feature of our study of crime develops from the complexity of identifying crime at microgeographic units of analysis. A natural setting for the development of interest in microgeographic units of analysis was the Chicago School of sociologists. Their interest in the social ecology of communities naturally led to an examination of crime at microunits of geography. Shaw and Myers (1929) were to come closest to a study of the criminology of place in their examination of juvenile delinquency for the Illinois Crime Survey. They mapped by hand the home addresses of over 9,000 delinquents. In a figure that looks as if it had been generated through modern computer applications (Figure 1.2), they showed that delinquents are clustered in areas marked by "physical deterioration, poverty and social disorganization" (Shaw and Myers 1929, 652). After completing this exercise Shaw (1929, 5) argued that the "study of such a problem as juvenile delinquency necessarily begins with a study of its geographical location."

We think that one simple explanation for the failure of others to take up Shaw and Myers' call was that mapping crime in the 1920s at the level of addresses was a monumental task. Mapping addresses of juveniles was arduous; mapping crime in a major city would have been perhaps an impossible exercise. And indeed data on the exact location of crime were not easily available to researchers at the time. The police in this regard did not keep accurate and easily analyzed records on where crime occurred. Such information was not to be available until the late 1960s in part as a response to the emergence of management information systems linked to emergency police responses. Even by the late 1980s data was poorly geocoded, often having

FIGURE 1.2. Map of the home addresses of juvenile offenders.
Original source: Shaw, C.R., Zorbaugh, F.M., McKay, H.D., and Cottrell, L.S. (1929). Delinquency areas. A study of the geographical distribution of school truants, juvenile delinquents, and adult offenders in Chicago. Chicago, IL: University of Chicago Press. Copyright 1929 by the University of Chicago.

inconsistencies in naming of streets or coding of places by slang names (Harada and Shemada 2006; Ratcliffe 2004a; Weisburd 2015b).

What this meant was that criminologists did not focus on crime and place in part because doing so would have required information systems that would not emerge for decades. The idea of automated crime mapping did not emerge until the late 1960s. Early applications (Carnaghi and McEwen 1970; Pauly and Finch 1967) showed the potential for visual representations of crime patterns through computer-generated maps, but wide scale use of crime mapping systems was not to develop until the late 1980s. Not surprisingly, this was also the period in which studies of the criminology of place began to gain momentum. For example, the first large-scale evaluation of hot spots policing developed in the late 1980s in Minneapolis (Sherman and Weisburd 1995).

Study of crime at place clearly falls within the domain of criminology, but its development was hampered by the difficulty of examining crime at microunits of geography. One question to ask in this regard is the extent to which we see an emergence of crime and place studies over the last three decades as police information systems became more sophisticated and crime mapping and geographic information systems became more accessible. As we noted earlier, Weisburd (2015a) reports that there has been a gradual increase in crime and places studies in *Criminology* since the early 1980s with about 6 percent of articles in 2010–2014 focused on these units, which represents a doubling of the proportion in 1990–1994.

AT WHAT SPECIFIC UNIT OF GEOGRAPHY?

The availability of crime data at X and Y coordinates[2] or addresses allows crime and place scholars to study crime at the unit they define as relevant to understanding the crime problem. Beginning with a microlevel approach also allows the researcher to examine the influences of larger geographic units, while starting at higher levels of geography may preclude examination of local variability. This problem is similar to that presented when choosing levels of measurement. The general admonition is to collect data at the highest level of measurement (interval or ratio scales), since such data can be converted to lower levels of measurement (Weisburd and Britt 2007).

At the same time, data collected at lower levels of measurement (e.g., ordinal or nominal scales) cannot simply be disaggregated to higher levels. The same principle applies to geographic information, though the language is reversed. Collecting data at the lowest geographic level, or smallest units of analysis, allows aggregation up to higher levels, but data collection at higher units may not allow conversion to more micro units of analysis. For this reason, Brantingham et al. (2009; see also Brantingham et al. 1976) argue that environmental criminology must begin with small spatial units and build larger units that reflect the reality of crime patterns.

While crime data are now readily available at the most microgeographic levels, it is still the case that a good deal of social data are only available at larger units, such as those examined by the U.S. Census. This means that criminologists often aggregate up when they try to draw conclusions about the causes of crime (e.g., Hipp 2007; Morenoff et al. 2001; Sampson et al. 1997), though the growing availability of data at all levels has begun to change this limitation of place-based studies (Groff et al. 2009; Sherman et al. 1989; Weisburd and Mazerolle 2000; Weisburd et al. 2012). So-called "big data" is changing what criminologists can learn at microgeographic levels on a daily basis (Crampton et al. 2013; Hardey 2007).

But even if other data become available at the X, Y coordinate level, as Michael Maltz (2009) notes, there just may not be enough data at a very micro level from which to draw inferences. Especially if one is interested in specific types of crime, they may be too rare in any single microplace unit to allow the identification of patterns or trends. Accordingly, there may be realities of the data that limit our ability to analyze crime at the most microgeographic levels.

But this belies the point of whether there is a specific unit of analysis that defines this area of study. Study of crime at the individual level seems to begin with a clearly defined unit of analysis – individuals. Is there a similar unit for study of crime at place? The simple answer to this question is that there is. The X and Y coordinates for a place represent a unique identifier for crime and place studies. This is the unique and smallest unit available for study. And a number of studies have used the address or X and Y coordinates for studying crime (e.g., see Pierce et al. 1988; Sherman et al. 1989; Thompson and Fisher 1996). In turn, many place-based criminologists have defined "facilities" as the key factor in understanding crime at place (Clarke and Eck 2007; Eck et al. 2007; Madensen and Eck 2008). In this perspective, we are interested in specific places such as schools, bars, community centers, or malls as places that attract or generate crime (Bowers 2014; Franquez et al. 2013; Groff 2011; Zhu et al. 2004).

There are both practical and theoretical reasons for selecting addresses. Practically, many police agencies in the United States give the address where the crime occurred, thus making the data easily available. And modern geographic information systems (GIS) used by many police can identify and correct invalid addresses, thus making these data relatively clean. Theoretically, addresses are directly connected to property parcels and property owners. The theory of place management (Madensen and Eck 2013), which we describe in Chapter 3, describes how the actions of owners influence crime.

But other scholars who study crime at place have examined aggregated units. Crime may be linked across addresses or streets that are located near to each other. For example, a drug market may operate across a series of blocks (Weisburd and Green 1995b; Worden et al. 1994), and a large housing project and problems associated with it may include many addresses and traverse street segments in multiple directions (see Skogan and Annan 1994). Accordingly, the

unit of analysis in crime and place studies may be assigned empirically based on the reality of the crime problem across places.

Does the fact that addresses or streets may be linked in crime challenge the basic idea of the criminology of place as a focus for criminological study? We think that the complexities of units of analysis in this area reflect the complexities of units of analysis more generally in criminology. In the 1980s, scholars began to challenge the traditional focus of criminology on individual offenders, noting that much crime was committed in cooffending groups, and the study of distinct individuals often missed key organizational and social components of the crime problem (Hindelang 1976; Reiss 1988; Reiss and Farrington 1991). While criminologists often study individuals as a unique unit of analysis, the reality of crime often involves aggregates of individuals who join together to commit crimes, from small groups of teenagers to major organized crime families.

In turn, in the study of communities and crime, the unit of analysis has varied not only in regard to the specific data available, but also the theoretical units that scholars have identified. There is no single accepted definition of the geographic boundaries of community (Bursik and Grasmick 1993a; Hipp and Boessen 2013). And indeed, community may be defined differently depending on the nature of the problem that scholars examine (Kwan 2012; Lynch and Addington 2007; Sampson et al. 1997; Sampson et al. 2002; Shaw and McKay 1942). While the ambiguity of community has led to criticism of the communities and crime perspective (e.g., Eck and Weisburd 1995; Groff et al. 2010), it often reflects the changing realities of communities in different settings (Grannis 1998; Guo and Bhat 2007).

Weisburd et al. (2012) have argued that community is also relevant for crime at place scholars, though at a much more microgeographic level than had previously been examined. They examine street segments, defined as both sides of the street between two intersections. They argue that scholars have long recognized the relevance of street blocks in organizing life in the city (Appleyard 1981; Brower 1980; Jacobs 1961; Taylor et al. 1984; Unger and Wandersman 1983). Following Taylor (1997; 1998), they note that street segments function as behavior settings (Barker 1968; Wicker 1987):

> First, people who frequent a street segment get to know one another and become familiar with each other's routines. This awareness of the standing patterns of behavior of neighbors provides a basis from which action can be taken. For example, activity at the corner store is normal during business hours but abnormal after closing. Second, residents develop certain roles they play in the life of the street segment (e.g., the busybody, the organizer). Consistency of roles increases the stability of activities at places. On many streets, for example, there is at least one neighbor who will accept packages for other residents when they are not at home. Third, norms about acceptable behavior develop and are generally shared. Shared norms develop from interactions with other residents and observations of behaviors that take place on the block without being challenged. Fourth, blocks have standing patterns of behavior that are temporally