



WRONG SIDE OF THE TRACKS: EXPLORING THE ROLE OF NEWSPAPER COVERAGE OF HOMICIDE IN SOCIALLY CONSTRUCTING DANGEROUS PLACES*

by

Derek J. Paulsen
Eastern Kentucky University

ABSTRACT

While much research has been conducted concerning the coverage of crime by the media, little is known about the spatial aspect of this coverage. Specifically, media research has failed to determine whether the coverage of crime by the media is truly representative of where crime occurs, or whether media coverage presents crime as occurring disproportionately in certain areas of a city. Building on earlier research, and utilizing an exhaustive spatial data set and advanced spatial statistics, this research attempts to determine the degree to which newspaper coverage of homicide is spatially representative of the true homicide picture. Findings indicate that actual homicide hot spots near the city center are more likely to be covered than those on the periphery of the city and that celebrated news coverage is focused largely within the city center. In addition to trends in the spatial coverage of homicides, important social implications relating to fear of crime will be discussed.

INTRODUCTION

The coverage of crime by the media has a long history in the United States, with crime being a staple of American news coverage as far back as the early 1800s (Surette, 1998). When the *New York Sun* became the first newspaper to include a column devoted specifically to the coverage of crime, its readership increased and other newspapers soon added crime columns of their own (Gordon & Heath, 1981, p. 227; Sherizen, 1978, p. 208). Coverage of crime by newspapers continued to develop throughout the rest of the 1800s and early 1900s with the formation of papers focused exclusively on crime and the development of specialized crime reporters or police beat reporters (Surette, 1998). The dawn of the new century brought with it the development of radio as a new medium for disseminating information about crime (Surette, 1998). The advent of radio altered the way in which crime news was relayed to the public, with the emphasis becoming more entertainment oriented (Surette, 1998). This entertainment style of reporting was further enhanced with the development of television, and crime became an even more popular news topic. Today, crime is among the most popular of all news topics.

Because of the immense popularity of crime as a topic of news, there has been no shortage of research on how crime is covered by the media (Surette, 1998). Numerous studies employing methods such as the time or total space devoted to crime (Deutschmann, 1959; Otto, 1962; Stempl, 1962) and summary coverage of an issue, story placement, and prominence of stories (Cirino, 1972; Deutschmann, 1959; Otto, 1962; Roshier, 1973; Sherizen, 1978; Stempl, 1962) [End Page 113] have revealed that crime is a significant and constant aspect of total news coverage. These results are consistent across time periods and cross-nationally (Lotz, 1991; Marsh, 1991).

In terms of television coverage of crime, research has shown that crime constitutes between 10 and 13 percent of total national news coverage (Cirino, 1972; Graber, 1980; Lowry, 1971) and around 20 percent of all local news coverage (Graber, 1980). For newspapers, the percentage of total space devoted to crime news is even higher than for television, with research showing that crime news constitutes between four and 28 percent of all news reported (Jerin & Fields, 1993; Lotz, 1991). The percentage of space devoted to crime increases to between 22 and 28 percent when all criminal

justice topics are considered (Dominick, 1978; Garofalo, 1981; Graber, 1980; Jerin & Fields, 1993; Lotz, 1991).

Research concerning what types of crime are covered has shown that both television and newspapers in general distort or misrepresent crime through their coverage of specific crimes (Abbott & Calonico, 1974; Cohen, 1975; Combs & Slovic, 1979; Einstadter, 1979; Fedler & Jordan, 1982; Graber, 1980; Humphries, 1981; Jaehnig et al., 1981). In particular, the main source of distortion of crime news was a disproportionate focus on crimes of violence such as homicide and robbery over crimes against property (Antunes & Hurley, 1977; Doob, 1985; Graber, 1980; Marsh, 1989; Skogan & Maxfield, 1981; Sheley & Ashkins, 1981; Sherizen, 1978).

Finally, research dealing with specific crimes, such as homicide, reveals important information concerning the characteristics of incidents that are covered by the media. First, homicide incidents involving white victims are more likely to be covered than those involving minority victims (Johnstone, Hawkins, & Michener, 1994; Paulsen, 2000; Pritchard & Hughes, 1997; Sorenson, Manz, & Berk, 1998; Weiss & Chermak, 1998). Second, those incidents involving female victims were more likely to be covered than those incidents involving male victims (Johnstone, Hawkins, & Michener, 1994; Paulsen, 2000; Pritchard & Hughes, 1997; Sorenson, Manz, & Berk, 1998; Weiss & Chermak, 1998). Third, younger homicide victims were more likely to be covered in the newspaper than older homicide victims (Johnstone, Hawkins, & Michener, 1994; Paulsen, 2000; Pritchard & Hughes, 1997; Sorenson, Manz, & Berk, 1998). Finally, those homicide incidents involving either multiple victims or multiple offenders were more likely to be covered than those incidents involving single victims or offenders (Johnstone, Hawkins, & Michener, 1994; Paulsen, 2000). Overall, homicide incidents that involved statistically deviant incident characteristics (i.e., female victims, young victims, multiple victim incidents) are more likely to be covered by the media than homicide incidents involving statistically normal incident characteristics (i.e., male victims, minority victims, single victim incidents).

In summarizing the literature concerning the media coverage of crime, several points can be made. First, regardless of the medium, crime is a significant portion of all news. Second, regardless of the medium, crime news disproportionately focuses on violent crimes such as homicide. Third, this disproportionate focus on violent crime exaggerates the frequency with which violent crime occurs. Fourth, crimes involving statistically deviant incident characteristics are more likely to be covered than those involving statistically normal incident characteristics. **[End Page 114]** Finally, these findings about the coverage of crime are consistent across historical time periods, political boundaries, and city size.

However, despite this impressive wealth of information concerning the media coverage of crime, there is an absence of research into spatial aspects of the media coverage of crime. Specifically, are crimes that occur in one area of a city more likely to be covered than those crimes that occur in other parts of a city? In particular, there are several questions concerning the spatial coverage of crime that are important to both spatial perception of crime and spatial fear of crime. Are actual crimes spatially consistent with the media coverage of crime or are crimes that occur in some areas ignored and those that occur in other areas emphasized? Is there spatial consistency over time in the media coverage of crime, in that the media consistently cover crimes that occur in some areas whereas they consistently ignore crimes that occur in other areas? Finally, is crime covered more in some places because of its relative infrequency of occurrence or are other factors more important to the selection of crimes for news coverage?

DATA

In conducting this exploratory research, homicides were chosen for analysis for two important reasons. First, because of the overrepresentation of violent crime in the news, the coverage of homicide has the potential to have a serious impact on public perception, fear of crime, and public policy. Fear of crime has been shown to be strongly associated with both the proportion of sensational (i.e., unexpected, quirky, heinous) local crimes covered and the amount of local homicide stories covered in the first 15 pages of the newspaper (Heath, 1984; Liska & Baccaglioni, 1990; Williams & Dickinson, 1993). Thus, if the media disproportionately cover homicides in one area of a city, they have the potential to impact public perception and fear of victimization for that area more than the disproportionate coverage of auto thefts. Second, because of the relative infrequency of homicides, they are a more practical crime type for analysis. Even in a city such as Houston, which has historically had a high homicide rate, the absolute number of homicides has never exceeded 750 in a year. This relative infrequency allows the analysis of the entire population of homicides in Houston rather than a sample as would be necessary for the analysis of other crime types. This analysis of the entire population should, in turn, contribute to the overall significance of the findings.

Because of the nature of the research topic being explored, the database had to be constructed from two separate data sets, one containing official homicide data and the other containing newspaper articles of homicides. In choosing a site for the research, Houston, Texas, was chosen largely because of the author's connections with both the Houston Police Department (HPD) and the *Houston Chronicle* newspaper. Both the HPD and *Houston Chronicle* were willing to grant the author access to data that would have been very difficult to acquire elsewhere. The first part of the data was gathered in 1996 and involved obtaining official police records from the Houston Police Department covering all incidents of criminal homicide (4,980) between 1986-1994. The second part of the data, containing all newspaper articles of homicide incidents published in the *Houston Chronicle* between 1986-1995, was obtained directly from the *Houston Chronicle* in the spring of 1997. Because this database was received directly from the newspaper publisher, it is a potentially more reliable and accurate account of all homicide articles than a manual search would have produced. [End Page 115]

The official police records contained numerous data elements relating to each homicide incident, including year, month, and day of the incident, victim and offender names (when known), incident location, victim and offender age, gender, and race (when known), motive, weapon used, and victim/offender relationship (when known). These police records were then matched to the *Houston Chronicle* article database. Every homicide incident for the nine year period was cross-checked with the *Houston Chronicle* in order to determine if there was a corresponding article concerning the incident. If a corresponding article(s) was found within the *Houston Chronicle*, the article(s) was then read and coded for several factors concerning the extent of news coverage. Specifically, how long was the article in both column inches and word length and in what section and on what page of the newspaper was the article printed.

Using the homicide incident address location provided in the official police records, each homicide incident was geo-coded using a GIS program. A GIS program is a relational database that allows tabular data in a .dbf format to be placed on a map in order to reference the data spatially. This geo-coding process takes a base map of a desired location, in this case Houston, and allows tabular data with the exact locations of street addresses to be positioned on the map. Thus, all of the data contained in the database were placed on the map according to the exact location in which it occurred.

DEPENDENT VARIABLES

Prior research concerning the newspaper coverage of homicide incidents has been somewhat simplistic in its operationalization of news coverage. The majority of studies have been concerned only with whether an incident received any coverage in the paper, failing to deal with issues of prominence in newspaper coverage. As Chermak (1995) stated, "Future research will have to use a combination of methodologies to link how the news production process combines with characteristics of an incident to determine what crimes become celebrated, what crimes get placed on the front page, and what crimes are relegated to the back sections of a newspaper" (p. 69). The issue of prominence of homicide coverage has important implications for fear of crime, public perception, and public policy issues (Heath, 1984; Liska & Baccaglini, 1990; Pritchard, 1986). Thus, dependent variables were created in order to explore fully the newspaper coverage of homicide incidents, specifically issues of prominence in coverage.

Three dependent variables were created to complement each other and are designed to measure prominence of an article based on where the article is positioned in the paper. An interview was conducted with the editor of the Metro/Local section of the *Houston Chronicle* in order to determine the level of prominence attached to articles based on their position in the newspaper. From this interview a classification scheme was created that allowed articles to be coded as one of three dependent variables based on the section, page number, and column in which they were printed. Each of these three dependent variables is a mutually exclusive dummy variable that represents a different level of prominence in the eyes of the editorial staff at the *Houston Chronicle* (Steve Jetton, personal communication, February 10, 2000).

The first dependent variable, "celebrated," contains those articles published within the first 15 pages of the front section and represents the most prominent articles in the eyes of the [End Page 116] *Houston Chronicle* editorial staff. Importantly, prior research has linked local homicides covered on the first 15 pages of the newspaper to increased levels of fear of crime (Liska & Baccaglini, 1990). The second dependent variable, "Locally Covered," contains those

articles published in the second half of the front section (after page 15), or in the second section, and not in the crime/local column of the paper. These articles represent a lower level of prominence than the celebrated articles, but a higher level of prominence than those incidents merely published in the crime/local column. The final dependent variable, "Crime Column," contains those articles published in the crime/local column of the newspaper. As mentioned, these articles were viewed by the editorial staff of the *Houston Chronicle* as being the least prominent of all homicide articles.

METHODS

While traditional quantitative analysis will be used to explore certain aspects of the research, in general traditional quantitative analysis is ill suited to assess the validity of spatial questions. Thus, several different spatial analytic techniques will be used. First, mean centers will be determined and compared for actual homicides and the different levels of newspaper coverage. A spatial mean is one of the simplest measures of spatial distribution and represents the mean of all X and Y coordinates for a series of point locations (Levine, 1999). In analyzing a single variable, the mean center provides the location at which the sum of the differences between the mean and all the point locations is zero (Levine, 1999).

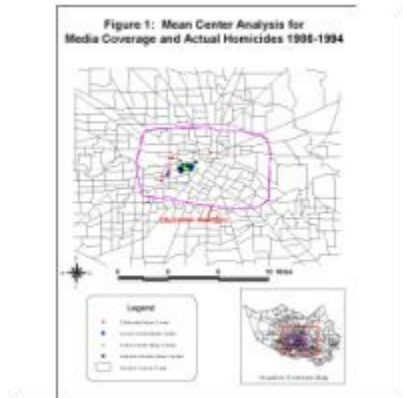
Secondly, hot spot analysis will be conducted to determine spatial consistency amongst actual homicides and different levels of newspaper coverage. Hot spot analysis is more sophisticated than mean center analysis in that it determines statistically significant concentrations of point patterns, much like a multivariate cluster analysis. Specifically, nearest neighbor hierarchical clustering (Nnh) determines groups of points that are spatially closer than would be expected to occur by chance alone (Levine, 1999).

In conducting an Nnh hot spot analysis using Crimestat, the user is required to specify two important criteria prior to beginning the analysis. First, the minimum number of points for the hot spot is selected. This determination sets the least amount of points required for a hot spot to be created. In these analyses the minimum number of points was set at five incidents. Secondly, the user must select the probability level for defining the threshold distance between the points in the hot spot (Levine, 1999). This selection determines the probability that the hot spot could be due to chance. In this analysis the probability level was set at the .05 level.

ANALYSIS

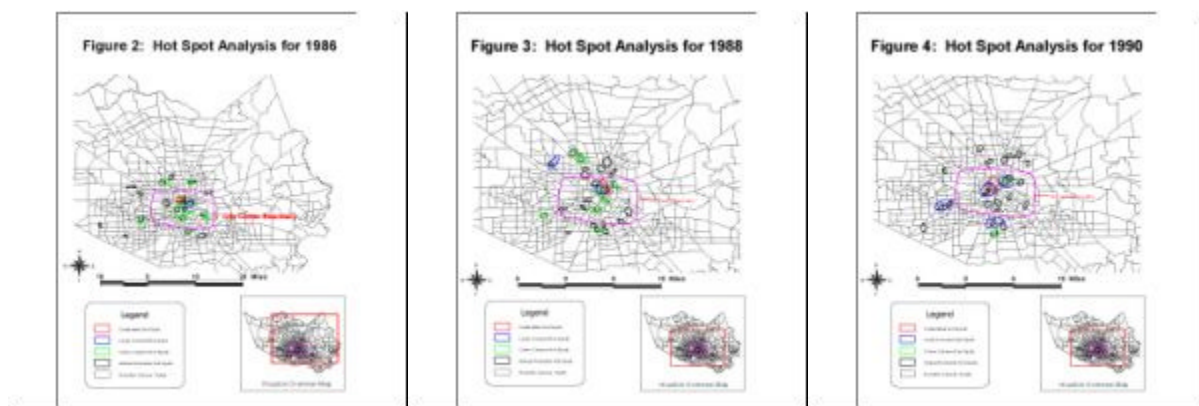
The first step in the analysis seeks to determine the difference in the spatial distribution of actual homicides and the different levels of newspaper coverage. Specifically, is the spatial distribution of actual homicides different from the spatial distributions of those incidents that receive celebrated coverage, local coverage, or coverage in the crime column? This is important because if the spatial patterns are inconsistent across these four different categories, it would indicate possible spatial inconsistencies in newspaper coverage. These spatial inconsistencies are particularly important when considering their potential impact on public perception of where [End Page 117] homicide occurs. If homicides are occurring predominately in one area of Houston but newspaper coverage focuses on a different area, it could lead to incorrect perceptions of where homicide occurs. Moreover, because research has shown that the level of newspaper coverage impacts public perception, assessing the spatial distributions of the different levels of coverage will provide a more accurate view of possible spatial distortion of homicides.

Figure 1 provides the results for the mean centers analysis of actual homicides, celebrated incidents, locally covered incidents, and incidents covered in the crime column for all years between 1986 and 1994. Looking at Figure 1, the results indicate strong clustering of the mean centers for actual homicides (black), with a spread of the mean centers for the different levels of newspaper coverage around this cluster. This indicates that actual homicide locations are fairly consistent over time.

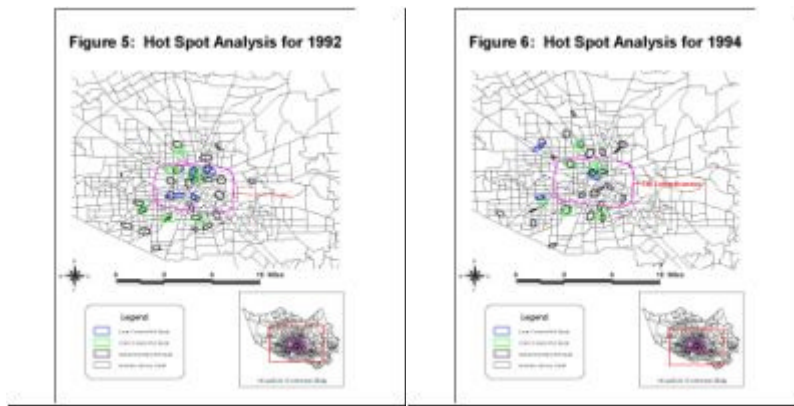


In contrast, the location of incidents covered in the newspaper is more spatially diverse. However, it is important to note that the degree of spatial inconsistency between the mean centers of the different levels of newspaper coverage and the actual homicide mean center varies by coverage type. Closest in similarity to the spatial distribution of the actual homicide mean centers are the crime column mean centers (green), with locally covered incidents (blue) being more spatially diverse and celebrated incidents (red) having the largest degree of spatial inconsistency with actual homicide locations. These findings appear to indicate that less celebrated homicide incidents (i.e. those in the crime column) are more spatially consistent with actual homicides, while more celebrated incidents are not very spatially consistent with actual homicides. Importantly, while spatial inconsistencies are apparent between actual homicides and different levels of newspaper coverage, the inconsistencies are not particularly large. Thus, while spatial inconsistency exists between actual homicides and different levels of coverage, the magnitude of these differences is not particularly dramatic.

Although the results of the mean centers analysis indicated there was spatial inconsistency between actual homicides and the different levels of news coverage, the analysis involved a rather simple analytic technique. Thus, in order to determine better the spatial consistency of actual homicides and different levels of newspaper coverage, the more advanced spatial analytic technique of hot spot analysis was used. As with mean centers analysis, the importance of this analysis is to determine if the newspaper focuses its coverage in areas that are spatially inconsistent with actual homicide locations.



Figures 2 through 6 provide the results of the hot spot analysis for the years 1986 (Figure 2), 1988 (Figure 3), 1990 (Figure 4), 1992 (Figure 5), and 1994 (Figure 6). Overall, the results appear to provide mixed results. While the results do not indicate that the hot spots of the different levels of news coverage are in different locations than those of actual homicides, neither do they indicate that the hot spots are completely consistent spatially.



Two general observations can be made about the spatial distributions of the different hot spots over the nine-year study period. First, all of the hot spots for the different levels of newspaper coverage are spatially consistent with actual homicide hot spots. Regardless of the type of coverage or number of hot spots created, every single newspaper coverage hot spot overlaps or is contained within at least one actual homicide hot spot. However, it is important to [End Page 118] note that not every actual homicide hot spot is spatially consistent with a newspaper coverage hot spot. This spatial inconsistency varies from a low of eight actual hot spots with no corresponding newspaper coverage hot spot in 1986 (Figure 2) to a high of 17 actual hot spots with no corresponding newspaper coverage hot spot in 1994 (Figure 6). Overall, 57 percent of all actual homicide hot spots between the years 1986-1994 had no corresponding newspaper coverage hot spots. These results seem to indicate that while newspaper coverage hot spots are spatially consistent with actual homicide hot spots, they are very selective to which hot spots they correspond. Importantly, it appears that those actual homicide hot spots that are closer to the city center are more likely to correspond to newspaper coverage hot spots than those on the periphery of the city. Specifically, 56 percent of actual homicide hot spots within the city center boundary had corresponding media hot spots, compared to only 36 percent of actual homicide hot spots outside the city center boundary.

The other important result from the hot spot analysis concerns the different location of the hot spots for celebrated coverage, local coverage, and crime column coverage. While the difference in the total number of hot spots for each level of newspaper coverage can largely be attributed to the number of articles in each different category, the distribution of these hot spots spatially is not so easily explained. The three different categories of newspaper coverage hot spots seem to have very different spatial patterns. The trend across the study's time period seems to indicate that the more celebrated the newspaper coverage, the more focused the hot spots near the city center, with less celebrated newspaper coverage being spread out more on the periphery of the city. This can be determined by analyzing the hot spots in reference to the graphic demarcating the city center boundary. This graphic represents loop 610; those areas within the loop are commonly considered to be in the downtown area of Houston. Celebrated article hot spots, although limited to only three total hot spots in the years 1986 (Figure 2), 1988 (Figure 3), and 1990 (Figure 4), appear to be more focused near the city center. Similarly, locally covered hot spots are focused near the city center in years 1986 (Figure 2) and 1992 (Figure 5), but more spatially dispersed in the years 1988 (Figure 3), 1990 (Figure 4) and 1994 (Figure 6). In contrast, the hot spot locations for articles in the crime column seem to correspond to more actual hot spots that are on the periphery of the city than either of the other two levels of newspaper coverage. Overall, this seems to indicate that celebrated newspaper coverage focuses on homicides near the city center, while less celebrated newspaper coverage (i.e., crime column) focuses more on homicides that occur on the periphery of the city.

Another important question in assessing the spatial distribution of newspaper coverage is the degree to which the different levels of newspaper coverage are spatially concentrated in certain areas of the city over time. This has important implications in that if spatial consistency exists in newspaper coverage hot spots over time, the public may perceive those areas as being more dangerous than other areas. Also, these areas may not actually have more homicides than other areas; they may just receive more concentrated news coverage over time than other areas. Moreover, because where the article is published in the paper impacts its overall effect on public perception, it is important to analyze the spatial consistency of the different levels of newspaper coverage.

Figures 7 through 9 provide the results of the hot spot analyses for the different levels of news coverage. In general the results appear to indicate that the degree of spatial consistency [End Page 119] and spatial dispersion is related to the degree of celebrated coverage. As articles become more celebrated, the degree of spatial consistency increases while the degree of spatial dispersion decreases.

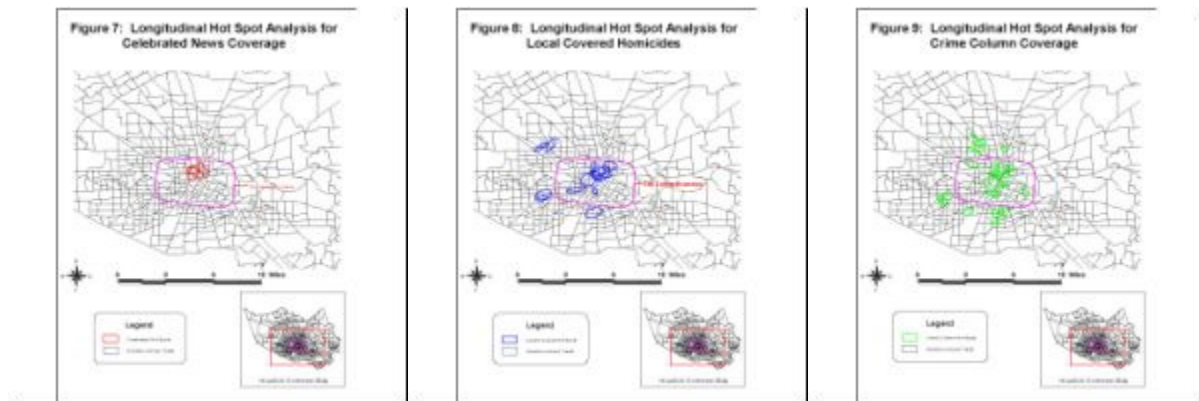
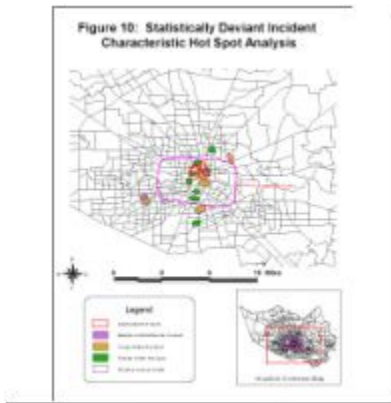


Figure 7 provides the results for the longitudinal hot spot analysis of celebrated articles in which this relationship between the degree of spatial consistency and dispersion can be seen. Although there are only three celebrated hot spots (1986, 1988, and 1990), they are closely bunched together in the city center of Houston. These findings are consistent with earlier results, in which celebrated hot spots were more likely to focus on actual hot spots in the city center than on the periphery of the city.

In contrast to the high degree of spatial consistency and low spatial dispersion found in celebrated hot spots, Figure 8 provides the results for the longitudinal hot spot analysis of locally covered articles. As discussed earlier, the staff of the *Houston Chronicle* see these articles as being less celebrated than those articles on the first 15 pages. In accordance with this less celebrated nature, the degree of spatial consistency and spatial dispersion are less than that of celebrated articles. Although there is a moderate degree of spatial consistency over time, the degree of spatial dispersion is much higher than that of celebrated articles. Specifically, 35 percent ($n=5$) of all locally covered hot spots are outside the city center area. This is consistent with earlier results, in which the location of locally covered hot spots were focused within the city center but also consisted of some actual hot spots on the periphery of the city.

Finally, Figure 9 provides the results of the longitudinal hot spot analysis for those articles covered in the crime column, the least celebrated of all article types. Consistent with other results, crime column hot spots experience the lowest degree of spatial consistency and the highest degree of spatial dispersion of the three types of newspaper coverage. Specifically, 46 percent ($n=12$) of the crime column hot spots are outside of the city center area, indicating a more heavy focus on actual hot spots on the periphery of Houston.

In order to better understand the reasons behind why there is a concentration of media hot spots within the city center area, a further analysis was conducted to determine what types of homicides are concentrated within this city center area. Specifically, an analysis was conducted to determine if statistically deviant homicide incidents (i.e., female victims, young victims [under 15], and multiple victim/offender incidents) clustered in this city center area. These three homicide incident types were chosen for analysis because prior research has indicated that it is these incident characteristics that are most likely to be covered in the newspaper (Johnstone, Hawkins, & Michener, 1994; Paulsen, 2000; Pritchard & Hughes, 1997; Sorenson, Manz, & Berk, 1998; Weiss & Chermak, 1998). Figure 10 shows the results of the statistically deviant incident type hot spot analysis. Importantly, the three different incident types appear to cluster together in the same location as the cluster of celebrated hot spots, indicating a possible explanation for the media focus in the city center. Specifically, 40 percent ($n=6$) of the statistically deviant homicide hot spots are contained within or overlap the three celebrated hot spots.



Overall, the results appear to indicate that the degree of spatial consistency and spatial dispersion are directly related to the degree of celebration for an article. As articles increase in [End Page 120] their degree of celebration, they also increase their spatial consistency over time and decrease their degree of spatial dispersion. Celebrated hot spots appear to focus more on actual hot spots within the city center while less celebrated hot spots are more likely to focus on actual hot spots on the periphery of the city. Finally, these celebrated hot spots appear to be consistent with a concentration of statistically deviant homicide incidents, possibly explaining their location within the city center area.

The final aspect of spatial analysis deals directly with one of the common responses from journalists as to why some homicides are covered in the paper and others not. Specifically, journalists often claim that the determining factor in whether or not a homicide is covered in the paper is whether or not it is a rare event in the neighborhood where it occurs (Steve Jetton, personal communication, February 10, 2000). Those homicides that occur in areas that have very few homicides will be more newsworthy than homicides that occur in areas where homicide is relatively common. Thus, homicides occurring in areas where it is a rare event should have a high percentage of homicides covered, while those occurring in areas where homicide is relatively normal should be covered in low percentages. In order to assess the validity of this hypothesis a bivariate analysis was conducted. Homicides per census tract were used as a proxy for homicides per neighborhood, because of the difficulty in determining what constitutes a neighborhood.

Table 1 provides the results of the bivariate analysis. Importantly, there is mixed support for the reporters' hypothesis. Specifically, those census tracts that had only one homicide during the nine-year study period had the lowest percent (57%) of homicides covered in the newspaper. In contrast, those census tracts that had over five homicides a year, the highest category of homicides measured, had 66 percent of their homicides covered in the newspaper. Moreover, the other three categories measured, ranging from less than one homicide a year to three to five homicides a year, fluctuated between 68 and 70 percent of homicides covered. Importantly, these results appear to provide contradictory support for the hypothesis put forth by newspaper reporters.

TABLE 1

PERCENTAGE OF HOMICIDES COVERED BASED ON FREQUENCY OF HOMICIDES PER CENSUS TRACT

Homicides per Tract	% of all		
		Census Tracts	Total Homicides
1 in 9 years	12%		46
Less than 1 a year	40%		783
1-2 a year	26%		1453
3-5 a year	21%		2302
Over 5 a year	1%		283
Total	100%		4849
			% Covered
			26(57%)
			783(70%)
			975(68%)
			1615(70%)
			187(66%)
			3350(69%)

In general, it appears from these results that the relative frequency of homicides in an area is not the determining factor of whether a homicide is covered that journalists claim it to be. Rather, the pattern of coverage indicates that the extremes of homicide frequency in an area, both low and high amounts, receive very little coverage from the newspaper, while all other areas receive rather similar coverage. This seems to indicate that other factors relating to the incident or incident location are more important in determining whether or not an incident is covered in the newspaper.

In order to explore this relationship more completely, a multiple regression analysis was conducted with the dependant variable being the percent of homicides in a census tract covered by the newspaper. Numerous independent variables related to the social status of a neighborhood were used in the model, including family poverty rate, percent of males employed, percent of female headed households, percent of households that are vacant, rate of home ownership, percent of population living in the same home for the past five years, percent of households receiving public assistance, percent of population under 24 years of age, percent of population that is black, and the homicide rate for each census tract (see [Appendix A](#) for more **[End Page 121]** detail on these independent variables). Table 2 provides the standardized beta coefficients for the multiple regression analysis. Only three variables are significant at the .05 level: Rate of home ownership, percent of population living in the same home for the past five years, and percent of households receiving public assistance. Of these three variables, the strongest predictor of the percent of homicides in a census tract that are covered in the newspaper was the percent of population living in the same home for the past five years (.326), followed by home ownership (.307) and public assistance (-.218). While the results of the multiple regression are not particularly strong ($R^2=.027$), they appear to indicate that more stable neighborhoods, with higher levels of home ownership and lower rates of poverty, are more likely to have a high percentage of homicides covered in the newspaper. Importantly, levels of homicide, percent of population that is black, and unemployment appear to have little to no real impact on whether or not neighborhoods have a high percentage of homicides covered in the paper. These findings are consistent with prior research which indicated that those homicide incidents that occurred in lower income areas were less likely to receive coverage in the newspaper than those incidents occurring in wealthier areas ([Johnstone, Hawkins, & Michener, 1994](#); [Paulsen, 2000](#); [Sorenson, Manz, & Berk, 1998](#)).

TABLE 2

MULTIPLE REGRESSION RESULTS FOR PERCENT OF HOMICIDES PER CENSUS TRACT COVERED IN THE NEWSPAPER

VARIABLES	Standardized Beta Coefficient
Family Poverty	-.006
Male Employment	.003
Female Headed Households	.150
Vacancy	.066
Home Ownership	.307**
Same Home for 5 years	.326**
Public Assistance	-.218*
Young Population	-.118
Black Population	-.052
Homicide rate	-.021
Adjusted R-Square	.027

* Chi square $p < .05$

** Chi square $p < .01$

*** Chi square $p < .001$

SUMMARY AND DISCUSSION OF SPATIAL ANALYSIS

In general several important findings resulted from the spatial analysis. First, while the mean centers of actual homicides and the different levels of newspaper coverage appear to be spatially inconsistent, it is not of a very large magnitude. Second, although hot spots of the different levels of newspaper coverage all correspond to actual homicide

hot spots, the majority of actual homicide hot spots do not have corresponding newspaper coverage hot spots. Thus, the *Houston Chronicle* is not focusing coverage on areas where homicide is low as much as it is ignoring certain areas where homicide is high. Importantly, those actual homicide hot spots near the city center are more likely to have corresponding newspaper coverage hot spots, particularly more celebrated newspaper hot spots, than those actual homicide hot spots on the periphery of the city. Moreover, this pattern of more celebrated hot spots grouping near the city center is consistent longitudinally and appears to coincide with hot spots of statistically deviant homicide incident types (i.e., female victims, young victims, multiple victim/offender incidents). Specifically, the more celebrated the newspaper coverage hot spot, the more likely it will exhibit spatial consistency near the city center. In contrast, less celebrated hot spots exhibit more spatial diversity and are more likely to group on the periphery of the city than celebrated hot spots. Finally, the frequency of homicides, or lack thereof, in an area appears to have an inconsistent impact on whether or not a homicide will be covered in the newspaper. The decision to cover a homicide appears to be guided more by factors such as the economic and social stability of a neighborhood (i.e., home ownership and residential stability) and neighborhood income levels, than by the rarity or normality of an incident occurring in a particular neighborhood. Thus, despite what newspaper reporters claim, it appears the type of neighborhood is more important in determining whether or not an incident will be covered than the amount of homicide that occurs in that neighborhood.

All of these findings point to the fact that the *Houston Chronicle* provides a skewed perception of where homicide occurs in Houston through how it covers homicide incidents. These findings are all the more important given that research on the newspaper coverage of [End Page 122] crime indicates that newspapers have a significant impact on public perception of violent crime, far more than any other news source (Davis, 1952; O'Connell & Whelan, 1996; Sheley & Ashkins, 1981; Wright & Ross, 1997). This impact is largely through the amount and type of crime covered. Readers' perceptions of crime were found to resemble more closely the presentation of crime in newspapers than official crime statistics (Davis, 1952; O'Connell & Whelan, 1996; Sheley & Ashkins, 1981). Based on the highly selective coverage of homicides, *Houston Chronicle* readers could have a very skewed perception of where homicides occur in Houston. Specifically, *Houston Chronicle* readers could tend to think that homicide is far more likely to occur in the city center area than outside the city center, despite the fact that nearly 60 percent of all homicide hot spots were outside the city center.

This skewed perception of homicide is important for several reasons. First, an individual's perception of homicide can impact both daily and political decisions. The perception of high homicide in the city center area could lead to economic problems such as repressed land values, lack of new business development, and potential redlining by banks and other financial institutions. Furthermore, Houston residents may be more willing to support tougher new crime related measures in the city center area because of the skewed perception that homicide is more likely in this area. As prior research has pointed out, new policies and practices are driven not necessarily by real crime problems, but rather the perception that there is a crime problem (Kappeler, Blumberg, & Potter, 2000). In the case of Houston, this could lead to repressive police practices such as racial profiling and increased police crackdowns to reduce a perceived homicide problem in the city center area. Conversely, this could lead to ignoring the homicide problem that exists outside of the city center area, potentially exacerbating the homicide problem in these areas.

Another important problem with the geographically skewed coverage of homicide in Houston is that a person's perception of the level of crime, particularly violent crime such as homicide, is associated with an individual's level of fear of crime (Chiricos, Eschholz, & Gertz, 1997). Although fear of crime has been found to be more strongly associated with TV viewing than newspaper readership, newspapers do play an important role in individuals' fear of crime. Fear of crime has been shown to be strongly associated with both the proportion of sensational (i.e., unexpected, quirky, and heinous) local crimes covered and the amount of local homicide stories covered in the first 15 pages of the newspaper (Heath, 1984; Liska & Baccaglioni, 1990; Williams & Dickinson, 1993). Based on these findings, the coverage of homicide by the *Houston Chronicle* could, in theory, increase fear of crime in certain areas of Houston. The spatial analysis indicated that those incidents covered on the first 15 pages were concentrated in the areas near the city center and overlapped hot spots of statistically deviant homicide types (i.e., female victims, young victims, and multiple victims/offender incidents) that are likely to be covered in a sensational manner. Thus, it stands to reason that fear of homicide amongst newspaper readers would be greatest for those areas near the city center. However, as mentioned previously while celebrated news coverage is concentrated near the city center, actual homicide is spatially dispersed throughout the city. This could have the effect of creating a false sense of fear in one area of Houston, while simultaneously creating a false sense of security in other areas. Spatial aspects of fear are particularly important in terms of daily decisions concerning where to shop and travel; these and other factors could have adverse consequences on the economy of a city. The overall impact could be one in which residents are afraid to venture into [End Page 123] the city center area of Houston, despite homicide victimization being more common outside of the city center. However, it is important to note that, as with perception of homicide, any effect on fear of crime is limited to only those portions of the population who actually read the paper. Thus, the possible effects that the coverage of homicide has on

fear of crime are limited in their extent.

While the results reported in this research are important, it is essential to understand that they are exploratory in nature and that more research needs to be conducted. First, future research needs to include other sources of media, specifically television coverage of crime, to determine spatial differences by news medium. Although newspapers play an important role in perceptions of crime, television has come to have a far greater impact on perceptions of crime over the last two decades. Second, research needs to include other crimes that have been found to be associated positively with fear of crime in order to determine the pervasiveness of spatial inconsistencies in media coverage. While media coverage of homicide is an important factor in fear of crime, other crimes also play a major role in increasing individuals' fear of crime and thus their spatial patterns need to be examined. Third, future research needs to explore more fully the factors that impact why crimes in some areas are covered more than crimes in other areas. More complex models involving different social and economic measures need to be developed and tested concerning why crime in some areas is covered and crime in other areas is ignored. Finally, future research needs to combine spatial analysis of media coverage of crime with surveys of public perception and fear of crime to determine the influence that these spatial inconsistencies have on the public. While this research alluded to the potential impact that media coverage has on both perception and fear of crime, future research needs to determine more clearly the true media impact on these processes.

ENDNOTE

* Direct correspondence to Professor Derek J. Paulsen, Eastern Kentucky University, Department of Criminal Justice and Police Studies, 1350 Fontaine Road, Lexington, KY, 40502 (Email: derek@criminalbehavior.com). In addition to his work on the media coverage of crime, Professor Paulsen's research interests include GIS and spatial aspects of crime, legal issues in policing, and the impact of technology on the criminal justice system. His prior research has appeared in such journals as *Policing and Society*, *Criminal Law Bulletin* and *Homicide Studies*.

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APPENDIX A

VARIABLES USED IN THE MULTIPLE REGRESSION ANALYSIS

Family Poverty: Family households with incomes above the poverty line.

Male Employment: Percent of males over 16 that are unemployed.

Female Headed Households: Percent of total households headed by females with children under 18.

Vacancy: Percent of total housing units that are vacant.

Home Ownership: Rate per 1,000 of owner occupied homes within that census tract.

Same Home for Five Years: Percent of population that have lived in the same home for past five years.

Public Assistance: Percent of total households receiving public assistance.

Young Population: Percent of population under the age of 24.

Black Population: Percent of population that is black.

Homicide rate: Rate of total homicides per 1,000 people for that census tract.